

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

IN RE PAYMENT CARD INTERCHANGE FEE
AND MERCHANT DISCOUNT ANTITRUST
LITIGATION

FILED UNDER SEAL

MEMORANDUM & ORDER
05-MD-1720 (MKB)

This document refers to: ALL ACTIONS

MARGO K. BRODIE, United States District Judge:

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In December of 2020, several Plaintiffs and several Defendants¹ in this multidistrict litigation moved for summary judgment and partial summary judgment.² In September of 2023,

¹ Plaintiffs consist of (1) the Equitable Relief Class, which was certified under Federal Rule of Civil Procedure 23(b)(2), *DDMB, Inc. v. Visa, Inc.*, No. 05-MD-1720, 2021 WL 6221326 (E.D.N.Y. Sept. 27, 2021); (2) the Target Plaintiffs, the 7-Eleven Plaintiffs, and The Home Depot (collectively, the “Direct Action Plaintiffs”), which are not members of the class and filed briefing on the summary judgment issue together, *In re Payment Card Interchange Fee & Merch. Disc. Antitrust Litig.*, No. 05-MD-1720, 2017 WL 4325812, at *3 (E.D.N.Y. Sept. 27, 2017), *order set aside on other grounds*, No. 05-MD-1720, 2018 WL 4158290 (E.D.N.Y. Aug. 30, 2018), and (3) the Grubhub Plaintiffs — another group of opt-out plaintiffs against whom Defendants sought summary judgment in September of 2023, *see infra* note 3.

Defendants consist of the Visa and Mastercard networks as well as “various issuing and acquiring banks” (the “Bank Defendants”). *In re Payment Card Interchange Fee & Merch. Disc. Antitrust Litig.*, 330 F.R.D. 11, 18 (E.D.N.Y. 2019). “At the beginning of this litigation . . . Visa and Mastercard were effectively owned by their member banks.” *Barry’s Cut Rate Stores Inc. v. Visa Inc.*, No. 05-MD-1720, 2019 WL 7584728, at *3 (E.D.N.Y. Nov. 20, 2019). In 2006 and 2008, “Mastercard and Visa, respectively, made initial public offerings (‘IPOs’), becoming publicly traded individual companies.” *Id.* However, Plaintiffs claim that the alleged anticompetitive practices have “continued despite the networks’ and the banks’ more recent attempt[s] to avoid antitrust liability by restructuring the Visa and [Mastercard] corporate entities.” *Id.*; (Equitable Relief Class Action Compl. (“Equitable Relief Class Compl.”) ¶ 1, annexed to the Decl. of Rosemary Szanyi (“Szanyi Decl.”) as SJDX4, Docket Entry No. 8520-1; *see also* Second Amended Target Compl. (“Target Compl.”) ¶¶ 78–79, annexed to Szanyi Decl. as SJDX3, Docket Entry No. 8520-1 (stating that “the IPOs did not change the essential character of” Visa and Mastercard’s “combinations in restraint of trade”); Sixth Am. 7-Eleven Compl. (“7-Eleven Compl.”) ¶¶ 152–64, annexed to Szanyi Decl. as SJDX1, Docket Entry No. 8520-1 (claiming that Visa’s and Mastercard’s “post-IPO structures . . . were designed to perpetuate, and not to disturb, the anticompetitive conduct detailed in this Complaint”); First Am. The Home Depot Compl. (“Home Depot Compl.”) ¶¶ 120–34, annexed to Szanyi Decl. as SJDX2, Docket Entry No. 8520-1 (same).)

² (Defs.’ Mot. for Summ. J. (“Defs.’ Mot.”), Docket Entry No. 8067; Defs.’ Mem. in Supp. of Defs.’ Mot. Under *Ohio v. American Express* (“Defs.’ Amex Mem.”), Docket Entry No. 8071; Mastercard & Bank Defs.’ Mem. in Supp. of Defs.’ Mot. Based on Mastercard’s Lack of Market Power (“MC’s Mkt. Pwr. Mem.”), Docket Entry No. 8073; Defs.’ Reply Mem. in Supp. of Defs.’ Amex Mem. (“Defs.’ Amex Reply”), Docket Entry No. 8156; Mastercard & Bank Defs.’ Reply Mem. in Supp. of MC’s Mkt. Pwr. Mem. (“MC’s Mkt. Pwr. Reply”), Docket Entry No. 8157; Equitable Relief Class Pls.’ Opp’n to Defs.’ Mot. Under *Amex* (“ERCP’s Amex Opp’n”), Docket Entry No. 8168; Direct Action Pls.’ Opp’n to Defs.’ Mot. Under *Amex* (“DAP’s Amex Opp’n”), Docket Entry No. 8194; Equitable Relief Class Pls.’ Opp’n to MC’s Mot. for Summ J. Based on MC’s Lack of Mkt. Pwr. (“ERCP’s Mkt. Pwr. Opp’n”), Docket Entry No. 8170; Direct

Defendants also moved for summary judgment against the Grubhub Plaintiffs.³ This Memorandum and Order addresses Defendants' motions for summary judgment "under *Ohio v. American Express*" and Defendant Mastercard's motions for summary judgment as to Mastercard's lack of market power.⁴

For the reasons discussed below, the Court grants in part and denies in part Defendants' motions for summary judgment under *Ohio v. American Express*, 585 U.S. ---, 138 S. Ct. 2274 (2018) ("*Amex*").⁵ In addition, the Court denies Mastercard's motions for summary judgment as to Mastercard's lack of market power.

Action Pls.' Opp'n to MC's Mot. for Summ. J. Based on MC's Lack of Mkt. Pwr. ("DAP's Mkt. Pwr. Opp'n"), Docket Entry No. 8191.)

³ (Defs.' Mot. for Summ. J. against Grubhub Pls. ("Defs.' Grubhub Mot."), Docket Entry No. 8925; Defs.' Mem. in Supp. of Defs.' Grubhub Mot. Under *Ohio v. American Express* ("Defs.' Grubhub *Amex* Mem."), Docket Entry No. 8929; Mastercard's Mem. in Supp. of Defs.' Grubhub Mot. Based on Mastercard's Lack of Market Power ("MC's Grubhub Mkt. Pwr. Mem."), Docket Entry No. 8932; Grubhub's Mem. in Opp'n to Defs.' Mot. for Summ. J. Under *Amex* ("Grubhub's *Amex* Opp'n"), Docket Entry No. 8933; Grubhub's Mem. in Opp'n to MC's Mot. for Summ. J. Based on MC's Lack of Mkt. Pwr. ("Grubhub's Mkt. Pwr. Opp'n"), Docket Entry No. 8936; Defs.' Reply in Supp. of Defs.' Grubhub *Amex* Mem. ("Defs.' Grubhub *Amex* Reply"), Docket Entry No. 8948; Mastercard's Reply in Supp. of MC's Grubhub Mkt. Pwr. Mem. ("MC's Grubhub Mkt. Pwr. Reply"), Docket Entry No. 8951.)

⁴ The Court acknowledges that the Bank Defendants joined Mastercard's motion for summary judgment as to Mastercard's lack of market power. The Bank Defendants, however, did not advance any arguments as to the Bank Defendants' lack of market power. Whether the Bank Defendants have market power — independently, jointly, or in concert with Visa and Mastercard — is not before the Court. Similarly, no party has moved for summary judgment based on Visa's lack of market power, and so that issue is also not before the Court. To the extent Plaintiffs intend to rely on an indirect showing of anticompetitive effect, a jury would still need to conclude that Visa possesses market power.

⁵ For simplicity, the Court refers to the district court's decision in *United States v. American Express Co.*, 88 F. Supp. 3d 143 (E.D.N.Y. 2015) as "*Am. Express I*," to the Second Circuit's decision in *United States v. American Express Co.*, 838 F.3d 179 (2d Cir. 2016) as "*Am. Express II*," and to the Supreme Court's decision in *Ohio v. American Express Co.*, 585 U.S. ---, 138 S. Ct. 2274 (2018), as "*Amex*."

I. Background

The Court assumes familiarity with the facts and extensive procedural history as set forth in prior decisions. *See In re Payment Card Interchange Fee & Merch. Disc. Antitrust Litig.*, 986 F. Supp. 2d 207 (E.D.N.Y. 2013) (*Interchange Fees I*), *rev'd and vacated*, 827 F.3d 223 (2d Cir. 2016) (*Interchange Fees II*); *In re Payment Card Interchange Fee & Merch. Disc. Antitrust Litig.*, 330 F.R.D. 11 (E.D.N.Y. 2019) (*Interchange Fees III*). The Court therefore provides only a summary of the relevant facts and procedural history.

a. Procedural history

In October of 2005, several complaints asserting similar antitrust claims against Visa, Mastercard, and various issuing banks were consolidated for pretrial purposes and transferred to the Eastern District of New York, where they were joined by other similar cases. *In re Payment Card Interchange Fee & Merch. Disc. Antitrust Litig.*, No. 05-MD-1720, 2008 WL 115104, at *1 (E.D.N.Y. Jan. 8, 2008). The consolidated cases included both class actions and individual actions. *Id.* In April of 2006, plaintiffs in the putative class actions (“Class Plaintiffs”) filed a consolidated amended class complaint that defined two classes: one seeking damages and the other seeking equitable relief. *Id.* at *2. In November of 2012, the Court provisionally certified a class settlement agreement between the Class Plaintiffs and Defendants. *In re Payment Card Interchange Fee & Merch. Disc. Antitrust Litig.*, No. 05-MD-1720, 2012 WL 12929536, at *1–2 (E.D.N.Y. Nov. 27, 2012). Following this preliminary settlement approval, “three groups of merchants that had not previously appeared as named parties — the Target, 7-Eleven, and Home Depot groups or, collectively, the ‘Direct Action Plaintiffs’ — opted out of the settlement’s damages class and filed their own complaints in other districts, all of which were ultimately transferred to this court and consolidated in the instant multidistrict litigation.” *In re Payment*

Card Interchange Fee & Merch. Disc. Antitrust Litig., No. 05-MD-1720, 2017 WL 4325812, at *3 (E.D.N.Y. Sept. 27, 2017), *order set aside on other grounds*, No. 05-MD-1720, 2018 WL 4158290 (E.D.N.Y. Aug. 30, 2018); (*see* Sixth Am. 7-Eleven Compl.; Home Depot Compl.; Second Am. Target Compl.). In 2013, the Court approved the settlement, *Interchange Fees I*, 986 F. Supp. 2d at 241, but, in 2016, the Second Circuit vacated the certification of the class and reversed approval of the settlement, *Interchange Fees II*, 827 F.3d at 240.⁶

In November of 2016, the Court appointed counsel to two putative classes under Rule 23(b)(2) (the “Equitable Relief Class”) and (b)(3) (the “Damages Class”). *In re Payment Card Interchange Fee & Merch. Disc. Antitrust Litig.*, No. 05-MD-1720, 2016 WL 8138988, at *1 (E.D.N.Y. Nov. 30, 2016). The Court approved a settlement between the Damages Class and Defendants in December of 2019. *In re Payment Card Interchange Fee & Merch. Disc. Antitrust Litig.*, No. 05-MD-1720, 2019 WL 6875472, at *36 (E.D.N.Y. Dec. 16, 2019.) In March of 2023, the Second Circuit affirmed the settlement in all material respects, except for the Court’s approval of the amount of service awards to the named Plaintiffs. *Fikes Wholesale, Inc. v. HSBC Bank USA, N.A.*, 62 F.4th 704, 727 (2d Cir. 2023). Separately, in September of 2021, the Court certified the Equitable Relief Class. *DDMB, Inc. v. Visa, Inc.*, No. 05-MD-1720, 2021 WL 6221326, at *50 (E.D.N.Y. Sept. 27, 2021).

⁶ The case was reassigned from Judge John Gleeson to the undersigned on December 17, 2014. (Order Reassigning Litigation, Docket Entry No. 6359.)

In December of 2020, Defendants, the 7-Eleven Plaintiffs, the Home Depot Plaintiffs, the Target Plaintiffs, and the Equitable Relief Class Plaintiffs filed summary judgment and *Daubert* motion papers.⁷

In October of 2022, the Court decided the *Daubert* motions, excluding certain expert opinions and otherwise denying the motions, and denied Defendants' Europay, Mastercard, and Visa ("EMV") motion for partial summary judgment.⁸

⁷ (Defs.' Mot. to Exclude Opinions of Dr. Reto Kohler ("Kohler Mot."), Docket Entry No. 8101; Defs.' Mot. to Exclude in Part Opinions of Prof. Robert G. Harris ("Harris Mot."), Docket Entry No. 8104; Defs.' Mot. to Exclude in Part Section 1 Opinions of Prof. Jerry Hausman ("Hausman Section 1 Mot."), Docket Entry No. 8081; Visa & Bank Defs.' Mot. to Exclude in Part Section 2 & Debit Opinions of Prof. Jerry Hausman ("Hausman Section 2 Mot."), Docket Entry No. 8084; Defs.' Mot. to Exclude in Part Opinions of Prof. Joseph E. Stiglitz ("Stiglitz Mot."), Docket Entry No. 8074; Defs.' Mot. to Exclude Opinions of Mansour Karimzadeh ("Karimzadeh Mot."), Docket Entry No. 8077; Visa & Bank Defs.' Mot. to Exclude Expert Testimony Concerning Visa's Fixed Acquirer Network Fee ("FANF Mot."), Docket Entry No. 8070; Defs.' Mot. to Exclude Rep. & Testimony of the 23(b)(2) Pls.' Expert Dennis W. Carlton ("Carlton Mot."), Docket Entry No. 8086; Defs.' Mot. to Exclude Opinions of Stephen C. Mott ("Mott Mot."), Docket Entry No. 8080; Defs.' Mot. to Exclude Opinions of David P. Stowell ("Stowell Mot."), Docket Entry No. 8075; Direct Action Pls.' Mot. to Exclude Portions of Rep. & Opinions of Def. Expert R. Garrison Harvey ("Harvey Mot."), Docket Entry No. 8090; Direct Action Pls.' Mot. to Exclude Rep. & Opinions of Def. Expert Glenn Hubbard ("Hubbard Mot."), Docket Entry No. 8108; Direct Action Pls.' Mot. to Exclude Rep. & Opinions of Def. Expert Barbara E. Kahn ("Kahn Mot."), Docket Entry No. 8114; Direct Action Pls.' Mot. to Exclude Rep. & Opinions of Def. Expert David J. Teece ("Teece Mot."), Docket Entry No. 8135; Direct Action Pls.' Mot. to Exclude Portions of Rep. & Opinions of Def. Expert David P. Kaplan ("Kaplan Mot."), Docket Entry No. 8207; Target Pls.' Mot. to Exclude Rep. & Opinions of Def. Expert Andres V. Lerner ("Lerner Mot."), Docket Entry No. 8121; Target Pls.' Mot. to Exclude Portions of Rep. & Opinions of Def. Expert Kevin M. Murphy ("Target Murphy Mot."), Docket Entry No. 8129; The Home Depot & 7-Eleven Pls.' Mot. to Exclude Portions of Rep. & Opinions of Def. Expert Kevin M. Murphy ("Home Depot & 7-Eleven Murphy Mot."), Docket Entry No. 8181; The Home Depot & 7-Eleven Pls.' Mot. to Exclude Portions of Reps. & Opinions of Def. Experts Marc Cleven & Stuart J. Fiske ("Cleven & Fiske Mot."), Docket Entry No. 8200.)

⁸ See *In re Payment Card Interchange Fee & Merch. Disc. Antitrust Litig.*, No. 05-MD-1720, 2022 WL 15053250 (E.D.N.Y. Oct. 7, 2022) (Experts Dr. Reto Kohler and Profs. Robert Harris, Jerry Hausman, and Joseph Stiglitz); *In re Payment Card Interchange Fee & Merch. Disc. Antitrust Litig.*, No. 05-MD-1720, 2022 WL 14862098 (E.D.N.Y. Oct. 8, 2022) (Experts

Following a May 11, 2023 status conference, the parties were instructed to submit supplemental briefing on Defendants' antitrust liability to address the applicability of a recent Second Circuit case, *1-800 Contacts, Inc. v. FTC*, 1 F.4th 102 (2d Cir. 2021), and two cases left unaddressed in the original briefing, *Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209 (1993), and *Virgin Atlantic Airways Ltd. v. British Airways PLC*, 257 F.3d 256 (2d Cir. 2001). This briefing was filed in August of 2023.⁹ In September of 2023, Defendants moved for summary judgment against the Grubhub Plaintiffs, relying on arguments substantially similar to those raised in the 2020 motion for summary judgment against the Direct Action Plaintiffs and the Equitable Relief Class Plaintiffs.

b. Factual background

At the center of this litigation are two networks: Visa and Mastercard (the "Networks").¹⁰ Visa and Mastercard own and operate the systems that facilitate card transactions and set the

Prof. Kevin Murphy, Mr. Marc Cleven, and Dr. Stuart Fiske); *In re Payment Card Interchange Fee & Merch. Disc. Antitrust Litig.*, No. 05-MD-1720, 2022 WL 15044626 (E.D.N.Y. Oct. 8, 2022) (Experts Mr. Mansour Karimzadeh, Prof. Dennis Carlton, Mr. Stephen Mott, and Prof. David Stowell); *In re Payment Card Interchange Fee & Merch. Disc. Antitrust Litig.*, No. 05-MD-1720, 2022 WL 14863110 (E.D.N.Y. Oct. 8, 2022) (Experts Prof. Jerry Hausman, Prof. Stephen Rowe, and Mr. Robert Hutchins); *In re Payment Card Interchange Fee & Merch. Disc. Antitrust Litig.*, No. 05-MD-1720, 2022 WL 14865281 (E.D.N.Y. Oct. 9, 2022) (denying Defendants' EMV motion for partial summary judgment); *In re Payment Card Interchange Fee & Merch. Disc. Antitrust Litig.*, 638 F. Supp. 3d 227 (E.D.N.Y. 2022).

⁹ (Target Pls.' Suppl. Mem., Docket Entry No. 8897; Direct Action Pls. & Equitable Relief Class Pls.' Suppl. Mem. ("DAP-ERCP's Suppl. Mem."), Docket Entry No. 8899; Target Pls.' Surreply, Docket Entry No. 8901; Direct Action Pls. & Equitable Relief Class Pls.' Surreply ("DAP-ERCP's Surreply"), Docket Entry No. 8902; Defs.' Suppl. Reply, Docket Entry No. 8898.) Target Plaintiffs filed supplemental memoranda separate from the other Direct Action Plaintiffs to address specifically the evidence of anticompetitive effects this plaintiff group relied on. (Target Pls.' Suppl. Mem. 1.)

¹⁰ The background provided in this section is for the benefit of the reader and is drawn from the parties' submissions, the Court's prior decisions, and the experts' reports. It is not relied upon by the Court in deciding the motions.

rules regarding those transactions. On one side are the issuing banks (“Issuers”). Issuers contract with Visa or Mastercard for the privilege of issuing Visa- or Mastercard-branded payment cards that allow cardholders to transact on the Visa or Mastercard network, respectively. *Interchange Fees II*, 827 F.3d at 228; *Interchange Fees I*, 986 F. Supp. 2d at 214. Issuers, such as Chase and Wells Fargo, in turn provide payment cards to consumers, typically as credit cards or debit cards. *Interchange Fees II*, 827 F.3d at 228. On the other side are the acquiring banks (“Acquirers”). Acquirers’ customers are typically merchants who provide goods or services to consumer-cardholders. *Id.* Acquirers receive and process payments from Issuers on behalf of their merchant-customers. *Id.*

When a customer uses a credit card to make a payment to a merchant, the merchant initiates a transaction and relays information (*e.g.*, the amount of the purchase and the type of card used) to the Acquirer. *Id.* The Acquirer then transmits this information to the Network which in turn relays it to the Issuer. *Id.*; *Interchange Fees I*, 986 F. Supp. 2d at 214. If the Issuer approves the transaction, the approval is relayed to the Acquirer and then back to the merchant. *Interchange Fees II*, 827 F.3d at 228.

At several stages of the transaction, fees are assessed for the service of facilitating the transaction. Between the cardholder and the Issuer, the transaction fee might be negligible or zero, as is often the case for debit cards, or may even be negative, in the case of so-called rewards credit cards that provide points, airline miles, or cash back to the cardholder. *See id.* Between the Issuer and the Network, the Issuer pays the Network a network fee, some of which may be returned to the Issuer in the form of “incentive payments.” Between the Issuer and the Acquirer, the Issuer remits payment to the Acquirer minus an “interchange fee.” *Id.* The interchange fee varies by network and by card type (*i.e.*, the interchange fee for a debit-card

transaction is typically less than that of a credit-card transaction, and the interchange fee for a premium, high rewards credit card is typically higher than that of a more basic credit card that offers little or no rewards to the cardholder). *Id.* Between the Acquirer and the Network, the Acquirer pays a fee to the Network, which may include a “Fixed Acquirer Network Fee” or “FANF.” Finally, the Acquirer credits the merchant’s account for the amount of the purchase minus what is known as the “merchant discount fee.” *Id.* Plaintiffs assert that the merchant discount fee includes the interchange fee and the network fee in addition to any fees imposed on the merchant by the Acquirer.¹¹

c. Challenged network rules

Plaintiffs are merchants who are bound by the Networks’ rules and who challenge those rules as anticompetitive. *Id.* They challenge the “honor all cards” (“HAC”) and “honor all issuers” (“HAI”) rules, which, together, require merchants to accept all Visa or Mastercard credit

¹¹ Although prior decisions in this case describe the “interchange fee” and “merchant discount fee” as two separate fees, the first going to the issuing bank and the second to the acquiring bank, *see Interchange Fees II*, 827 F.3d at 228, experts and the parties in this litigation have referred to the interchange fee as a *component* of the merchant discount fee. Professor Jerry Hausman, for example, describes a merchant discount fee made up of three component fees: the interchange fee to the issuing bank, the network fee to Visa or Mastercard, and the acquirer fee to the acquiring bank. (Expert Rep. of Prof. Jerry Hausman (“Hausman Rep.”) ¶¶ 66–67, annexed to Szanyi Decl. as SJDX400, Docket Entry No. 8526-17.) Dr. Robert G. Harris describes the merchant discount fee similarly, (Expert Rep. of Dr. Robert G. Harris (“Harris Rep.”) ¶ 25, annexed to Szanyi Decl. as SJDX391, Docket Entry No. 8526-12), and Defendants write that the merchant discount fee is “comprised of the acquirer fee . . . and may include the cost of some or all of the Visa and Mastercard interchange and network fees that the acquirer pays and passes on to the merchant,” (Defs.’ R. 56.1 Stmt. (“Defs.’ 56.1”) ¶ 46, Docket Entry No. 8068). The parties disagree about whether merchants pay interchange fees directly, (*see* Direct Action Pls.’ Resp. to Defs.’ 56.1 (“DAP’s 56.1 Resp.”) 37, Docket No. 8195 (“In fact, merchants pay interchange fees directly.”)), or whether acquirers pay interchange fees and pass on some or all of the cost to merchants, (*see* Defs.’ Reply in Supp. of Defs.’ 56.1, at 46, Docket Entry No. 8103 (stating that “acquirers, not merchants, pay interchange and network fees, and . . . acquirers pass on some or all of these costs to merchants”)). The Court does not express an opinion on this disagreement in this decision.

or debit cards if they accept any of them, (*see* 7-Eleven Compl. ¶ 3), as well as multiple forms of “anti-steering” rules, which “prohibit merchants from influencing customers to use one type of payment over another.” *Interchange Fees II*, 827 F.3d at 228. Two types of anti-steering rules are “no-surcharge” and “no-discount” rules, “which prohibit merchants from charging different prices at the point of sale depending on the means of payment.” *Id.* Plaintiffs claim that the challenged rules, in combination with the “default interchange fee” that “applies to every transaction on the network (unless the merchant and issuing bank have entered into a separate agreement), . . . allow the issuing banks to impose an artificially inflated interchange fee that merchants have little choice but to accept.” *Id.*

Notably, the Networks’ rules have changed since the beginning of this litigation. In 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, which included the Durbin Amendment, was signed into law and “limited the interchange fee that issuing banks could charge for debit card purchases.” *Barry’s Cut Rate Stores Inc. v. Visa, Inc.*, No. 05-MD-1720, 2019 WL 7584728, at *5 (E.D.N.Y. Nov. 20, 2019) (quoting *Interchange Fees II*, 827 F.3d at 229). The Durbin Amendment also “required the Federal Reserve to issue rules limiting the banks’ practice of issuing debit cards that were compatible with only the issuer’s networks,” “allowed merchants to discount debit card purchases relative to credit card purchases,” and allowed merchants to place minimum-purchase limits on credit card transactions. *Id.* (citations omitted). In 2011, Visa and Mastercard entered into a consent decree with the Department of Justice under which they “agreed to remove their rules prohibiting merchants from product-level discounting of credit and debit cards.” *Id.* (quoting *Interchange Fees I*, 986 F. Supp. 2d at 215). Plaintiffs claim, however, that the current versions of the rules are still anticompetitive. (*See, e.g.*, 7-Eleven Compl. ¶ 120 (noting that Visa and Mastercard “maintain” the prohibition against

surcharging by issuer “to this day”); Home Depot Compl. ¶ 160 (stating that despite the 2011 consent decree, Visa and Mastercard “still prohibit merchants from offering discounts that encourage consumers to use cheaper forms of payment”); 7-Eleven Compl. ¶ 191 (describing Visa and Mastercard’s “now-current anti-surcharging rules”).) In addition, they seek damages for the allegedly anticompetitive effects of the earlier versions of these rules. (*See* 7-Eleven Compl. ¶ 1 (defining the Damages Period as beginning on January 1, 2004).)

In addition to the claims described above, Plaintiffs also challenge a number of Defendants’ other practices, including Visa’s imposition of a FANF, (*see, e.g., id.* ¶ 202; Home Depot Compl. ¶ 173; Target Compl. ¶ 154; Equitable Relief Class Compl. ¶ 259); Visa and Mastercard’s migration to EMV technology, (*see, e.g.,* 7-Eleven Compl. ¶¶ 206–31; Home Depot. Compl. ¶¶ 97–119; Equitable Relief Class Compl. ¶¶ 269–87); and allegedly exclusionary conduct in the debit market, (*see, e.g.,* 7-Eleven Compl. ¶¶ 194–99; Home Depot Compl. ¶¶ 166–70).

II. Discussion

a. Standard of review

Summary judgment is proper only when “there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a); *Radwan v. Manuel*, 55 F.4th 101, 113 (2d Cir. 2022) (quoting Fed. R. Civ. P. 56(a)). The court must “constru[e] the evidence in the light most favorable to the nonmoving party,” *Radwan*, 55 F.4th at 113 (alteration in original) (quoting *Kuebel v. Black & Decker Inc.*, 643 F.3d 352, 358 (2d Cir. 2011)), and “resolve all ambiguities and draw all permissible factual inferences in favor of the party against whom summary judgment is sought,” *Koral v. Saunders*, 36 F.4th 400, 408 (2d Cir. 2022) (quoting *Terry v. Ashcroft*, 336 F.3d 128, 137 (2d Cir. 2003)). The role of the court “is not

to resolve disputed questions of fact but only to determine whether, as to any material issue, a genuine factual dispute exists.” *Kee v. City of New York*, 12 F.4th 150, 167 (2d Cir. 2021) (quoting *Kaytor v. Elec. Boat Corp.*, 609 F.3d 537, 545 (2d Cir. 2010)). A genuine issue of fact exists when there is sufficient “evidence on which the jury could reasonably find for the [nonmoving party].” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 252 (1986). The “mere existence of a scintilla of evidence” is not sufficient to defeat summary judgment. *Id.* The court’s function is to decide whether, “after resolving all ambiguities and drawing all inferences in favor of the nonmovant, a reasonable jury could return a verdict for the nonmovant.” *Miller v. N.Y. State Police*, No. 20-3976, 2022 WL 1133010, at *1 (2d Cir. Apr. 18, 2022) (first citing *Anderson*, 477 U.S. at 248; and then citing *Garcia v. Hartford Police Dep’t*, 706 F.3d 120, 127, 129 (2d Cir. 2013)). The moving party, however, need not *prove* a negative; rather, where “the burden of proof at trial would fall on the nonmoving party, the moving party ‘can shift the initial burden by pointing to a lack of evidence to go to the trier of fact on an essential element of the nonmovant’s claim.’” *McKinney v. City of Middletown*, 49 F.4th 730, 738 (2d Cir. 2022) (quoting *Jaffer v. Hirji*, 887 F.3d 111, 114 (2d Cir. 2018)); *see also Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986) (“[W]e find no express or implied requirement in Rule 56 that the moving party support its motion with affidavits or other materials *negating* the opponent’s claim.”); *El-Nahal v. Yassky*, 835 F.3d 248, 252 (2d Cir. 2016) (“[T]he movant’s burden will be satisfied if he can point to an absence of evidence to support an essential element of the nonmoving party’s claim.” (quoting *Goenaga v. March of Dimes Birth Defects Found.*, 51 F.3d 14, 18 (2d Cir. 1995))).

In the antitrust context, summary judgment serves a “vital function” by assisting courts in “avoiding wasteful trials and preventing lengthy litigation that may have a chilling effect on pro-

competitive market forces.” *Tops Mkts., Inc. v. Quality Mkts., Inc.*, 142 F.3d 90, 95 (2d Cir. 1998). While courts on summary judgment must view the evidence in the light most favorable to the party opposing the motion, “in the context of antitrust litigation[,] the range of inferences that may be drawn from the ambiguous evidence is limited; the nonmoving party must set forth facts that tend to preclude an inference of permissible conduct.” *Cap. Imaging Assocs., P.C. v. Mohawk Valley Med. Assocs., Inc.*, 996 F.2d 537, 542 (2d Cir. 1993) (citing *Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp.*, 475 U.S. 574, 586–87 (1986)). Evidence that is equally suggestive of competition as collusion, for example, is insufficient to survive summary judgment. *See, e.g., Williamson Oil Co., Inc. v. Philip Morris USA*, 346 F.3d 1287, 1300 (11th Cir. 2003) (“Evidence that does not support the existence of a . . . conspiracy any more strongly than it supports conscious parallelism is insufficient to survive a defendant’s summary judgment motion.” (citing *Matsushita*, 475 U.S. at 594)). “[B]roader inferences,” however, “are permitted . . . when the conspiracy is economically sensible for the alleged conspirators to undertake.” *In re Publ’n Paper Antitrust Litig.*, 690 F.3d 51, 63 (2d Cir. 2012). Conversely, summary judgment may be granted where the nonmovant’s case relies on evidence that defies economic sense. *Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 468–69 (1992) (“If the plaintiff’s theory is economically senseless, no reasonable jury could find in its favor, and summary judgment should be granted.”).

b. Legal Background

i. Governing standards in antitrust law

The Sherman Act prohibits every “contract, combination . . . , or conspiracy, in restraint of trade or commerce.” 15 U.S.C. § 1. The Supreme Court has “long recognized that in the view of the common law and the law in this country when the Sherman Act was passed, the phrase

‘restraint of trade’ is best read to mean ‘undue restraint.’” *NCAA v. Alston*, 594 U.S. ---, ---, 141 S. Ct. 2141, 2151 (2021). To prove a Sherman Act violation under Section 1, a plaintiff must establish (i) the existence of a contract, combination, or conspiracy that (ii) unreasonably restrains trade. *1-800 Contacts*, 1 F.4th at 114.

To determine whether a challenged restraint is unreasonable, courts assess the restraint under one of three standards: First, some restraints are so patently unreasonable as to be deemed unreasonable *per se*. *Alston*, 141 S. Ct. at 2156 (“[S]ome agreements among competitors so obviously threaten to reduce output and raise prices that they might be condemned as unlawful *per se* or rejected after only a quick look.”). The anticompetitive effects of these restraints are unambiguous and courts need not carefully evaluate market realities to determine that such restraints are unreasonable. *Id.* at 2155–56. These agreements “lack . . . any redeeming virtue” and may be condemned “without elaborate inquiry.” *1-800 Contacts*, 1 F.4th at 114–15 (citing *N. Pac. Ry. Co. v. United States*, 356 U.S. 1, 5 (1958)). This designation is used sparingly and typically applies only to agreements between competitors to fix prices or divide markets. *Id.*; *N. Pac. Ry. Co.*, 356 U.S. at 5.

Second, some restraints are plainly anticompetitive — such that “an observer with even a rudimentary understanding of economics” would see how the restraint harms competition, *Cal. Dental Ass’n v. FTC*, 526 U.S. 756, 770 (1999) — but do not fit squarely within the proscribed “*per se*” categories of price fixing or market allocation. In these cases, courts may determine unreasonableness in the “twinkling of an eye” with what is known as a “quick look.” *Alston*, 141 S. Ct. at 2155 (quoting *NCAA v. Bd. of Regents of Univ. of Okla.*, 468 U.S. 85, 110 (1984)).

(“*NCAA v. Oklahoma*”).¹² A quick look, however, is only appropriate where courts have gained enough experience with a particular type of restraint to conclude that its anticompetitive effects almost certainly outweigh any procompetitive justifications. *Id.* at 2156.

Third, and finally, courts most often assess challenged restraints under the “rule of reason.” Determining whether a restraint is undue for purposes of the Sherman Act “presumptively” calls for a rule of reason analysis. *Id.* at 2151 (quoting *Texaco Inc. v. Dagher*, 547 U.S. 1, 5 (2006)). The rule of reason requires a court to “conduct a fact-specific assessment of ‘market power and market structure’” to assess a challenged restraint’s “actual effect on competition.” *Amex*, 138 S. Ct. at 2284 (quoting *Copperweld Corp. v. Indep. Tube Corp.*, 467 U.S. 752, 768 (1984)). The goal is for a court to “distinguish between restraints with anticompetitive effect that are harmful to the consumer and restraints stimulating competition that are in the consumer’s best interest.” *Id.* (quoting *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 551 U.S. 877, 886 (2007)). The purpose of antitrust law is to protect consumers, markets, and competition — not to protect one competitor from another. *Brooke Grp. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 224 (1993) (“It is axiomatic that the antitrust laws were passed for ‘the protection of *competition*, not *competitors*.’” (quoting *Brown Shoe Co. v. United States*, 370 U.S. 294, 320 (1962))). Accordingly, a plaintiff must make a *prima facie* showing that “the challenged action had an actual adverse effect on *competition as a whole* in the

¹² The quick look approach is also described as “an abbreviated version of the rule of reason” analysis. *United States v. Apple, Inc.*, 791 F.3d 290, 329–30 (2d Cir. 2015). That is, a court will still apply the three-step burden shifting framework, except that the plainly anticompetitive nature of the challenged conduct relieves the plaintiff of her burden to show an actual anticompetitive effect at the first step. *Id.* at 330. Unlike *per se* condemnation, however, the court will assess the defendant’s procompetitive justifications for the challenged conduct. *Id.*

relevant market.” *Tops Mkts.*, 142 F.3d at 96 (emphasis added) (quoting *Cap. Imaging Assocs.*, 996 F.2d at 543).

A plaintiff’s initial burden under *Tops* corresponds to the first step of the three-step burden shifting framework under the rule of reason: to show that the “challenged action has had an actual adverse effect on competition.” *Spinelli v. NFL*, 903 F.3d 185, 212 (2d Cir. 2018) (citing *Cap. Imaging Assocs.*, 996 F.2d at 543); *see also Amex*, 138 S. Ct. at 2284. Second, the burden shifts to the defendant to offer a procompetitive justification for the challenged conduct. *Amex*, 138 S. Ct. at 2284. Third, if the defendant’s justification is sufficient, the burden shifts back to the plaintiff to demonstrate that the procompetitive ends can be achieved through substantially less anticompetitive means. *Id.*

At the first step — establishing anticompetitive effect — the plaintiff can provide either direct evidence of anticompetitive effect, such as “reduced output, increased prices, or decreased quality in the relevant market,” or indirect evidence of anticompetitive effect, which “would be proof of market power plus some evidence that the challenged restraint harms competition.” *Id.* If a plaintiff can demonstrate an actual adverse effect on competition, such as reduced output, there is no need to also show market power. *Geneva Pharms. Tech. Corp. v. Barr Lab’ys Inc.*, 386 F.3d 485, 509 (2d Cir. 2004). Output, prices, and quality are compared to the levels that might be observed but for the challenged restraints (a hypothetical scenario often referred to as the “but-for world”). *Amex*, 138 S. Ct. at 2288 (explaining, for example, necessity for plaintiff to show that the price was “higher than the price *one would expect to find* in a competitive market” (emphasis added)).

Finally, anticompetitive effect — either directly or indirectly — must be shown “in the relevant market.” *Id.* at 2284. Courts often begin with defining the relevant market because

“courts usually cannot properly apply the rule of reason without an accurate definition of the relevant market.” *Id.* at 2285; *see also Walker Process Equip., Inc. v. Food Mach. & Chem. Corp.*, 382 U.S. 172, 177 (1965) (“Without a definition of [the] market there is no way to measure [a defendant’s] ability to lessen or destroy competition.”). The relevant market is defined as the “area of effective competition” and is typically the “arena within which significant substitution in consumption or production occurs. *Amex*, 138 S. Ct. at 2285 (citations omitted).

ii. *Ohio v. American Express*

In 2018, after this multidistrict litigation had been proceeding for over a decade, the Supreme Court decided *Ohio v. American Express*, and did so in a way that had profound implications for the present litigation. The Supreme Court made clear that in antitrust cases involving certain kinds of two-sided platforms, it is necessary to consider both sides of the platform. *Amex*, 138 S. Ct. at 2286–87. Specifically, for platforms that facilitate transactions — and where the product consumed on both sides of the market is a “transaction” — it is necessary to define the market as a two-sided market for a particular type of transaction and any anticompetitive effect must be shown on both sides of the platform. *Id.* at 2286. In the context of credit cards, merchants and cardholders are both “consumers” of credit-card transactions and the price of a credit-card transaction is the net price across both sides of the market. *Id.*

As the Second Circuit recently explained, the need to consider both merchants and cardholders stems from economic forces at work in the market for credit cards:

The credit card industry is divided among four competing networks: Amex, Visa, MasterCard, and Discover. [*Amex*, 138 S. Ct. at 2282.] The market is characterized by high barriers to entry. New entrants face a “chicken-and-egg” problem because “merchants value a payment system only if a sufficient number of cardholders use it and cardholders value a payment card only if a sufficient number of merchants accept it.”

Credit card networks such as Amex “operate what economists call a ‘two-sided platform,’” which “offers different products or services to two different groups who both depend on the platform to intermediate between them.” [*Amex*], 138 S. Ct. at 2280. Amex provides credit-card services to both “merchants,” who accept Amex as payment, “and cardholders,” who use Amex to make payments. [*Amex*], 138 S. Ct. at 2279–80. Both parties are necessary; “no credit-card transaction can occur unless both the merchant and the cardholder simultaneously agree to use the same credit-card network.” *Id.* at 2280.

In re Am. Express Anti-Steering Rules Antitrust Litig., 19 F.4th 127, 135–36 (2d Cir. 2021) (footnotes omitted). These platforms, therefore, are “better understood as supplying only one product — transactions.” *Amex*, 138 S. Ct. at 2286 (internal quotation marks and citation omitted).

Similarly, the Second Circuit also recently explained that “[t]he central holding of *Amex* . . . was that in a case brought under the Sherman Act that involves a ‘two-sided transaction platform,’ the relevant market must *always* include both sides of the platform.” *US Airways v. Sabre Holdings Corp.*, 938 F.3d 43, 56 (2d Cir. 2019) (quoting *Amex*, 138 S. Ct. at 2287). Underscoring the point, the court reiterated in *US Airways* that “evaluating both sides of a two-sided transaction platform is necessary to accurately assess competition.” *Id.* at 57 (alteration omitted) (quoting *Amex*, 138 S. Ct. at 2287). Accordingly, “[i]n cases involving two-sided transaction platforms, the relevant market must, as a matter of law, include both sides of the platform.” *Id.*

The procedural history of *Amex*, however, helps to explain the limits of *Amex*’s applicability to the present litigation. At the district court, the *Amex* plaintiffs defined a one-sided market; namely, the market for general purpose credit and charge card network merchant services, *Am. Express I*, 88 F. Supp. 3d at 170, and alleged that American Express’ anti-steering

rules (among others) harmed competition in this market, *id.* at 162–63.¹³ Based on this definition, evidence of anticompetitive effects could consist of increased prices for *merchant acceptance* of credit cards, decreased output in terms of *merchant acceptance* of credit cards, or otherwise stifled competition in the market for *merchant acceptance* of credit cards. Proceeding with this definition, the district court conducted a thorough and extensive seven-week bench trial. *Am. Express I*, 88 F. Supp. 3d at 150–51. After trial, the district court concluded that American Express violated Section 1 of the Sherman Act, *id.* at 238, and entered an injunction against American Express enjoining it from enforcing its anti-steering provisions for ten years, 2015 WL 1966362 (E.D.N.Y. Apr. 30, 2015). On appeal, American Express contended that the district court erred in looking at only one side of the market. The Second Circuit agreed and entered judgment in favor of American Express. *Am. Express II*, 838 F.3d 179, 206–07 (2d Cir. 2016). In *Amex*, a divided Supreme Court affirmed — although for reasons that slightly differed from the Court of Appeals. *See generally Amex*, 138 S. Ct. 2274.

The *Amex* plaintiffs’ case rested entirely on harm to one side of the market. 138 S. Ct. at 2287 (“The plaintiffs stake[d] their entire case on proving that Amex’s agreements increased merchant fees.”). Given the market definition adopted by the district court (*i.e.*, the market for merchant services), the plaintiffs made no attempt to show harm on the consumer side of the market, nor to show that the two-sided market was harmed in the aggregate (even if consumers themselves were not harmed by the anti-steering provisions). Considering the plaintiffs’

¹³ “[T]he court adopts the general market definition advanced by Plaintiffs’ economics expert, Dr. Michael Katz, and accordingly finds that the relevant market for the purpose of the court’s antitrust analysis in this case is the market for general purpose credit and charge card network services.” *Am. Express I*, 88 F. Supp. 3d at 170. In the “general purpose card network services market . . . Visa, MasterCard, American Express, and Discover compete[] to sell network services to *merchants*.” *Id.* at 171 (quotation marks omitted) (emphasis added).

complete absence of evidence tending to show harm to both sides of the transaction market, *Amex* offers little guidance to lower courts in terms of what evidence (or how much) must be shown to demonstrate the existence of a triable question of fact as to harm to a two-sided transaction market. *Amex* does however make clear that a plaintiff must proffer either direct evidence of anticompetitive effect, such as “reduced output, increased prices, or decreased quality in the relevant market,” or indirect evidence of anticompetitive effect, which “would be proof of market power plus some evidence that the challenged restraint harms competition.” *Id.* at 2284.

c. Applicable standard

As discussed above, antitrust cases “presumptively” call for rule of reason analyses. *Alston*, 141 S. Ct. at 2151. Departure from the rule of reason is only warranted if the challenged agreements fall into a proscribed *per se* category (*i.e.*, agreements among horizontal competitors to fix prices, restrict output, or divide markets) or if the anticompetitive effects are so plainly evident that an observer with even a “rudimentary understanding of economics” could see how the challenged restraints harm competition (*i.e.*, the “quick look” analysis). Even under such circumstances, courts should be loath to depart from the rule of reason until they have developed “considerable experience with the type of restraint at issue.” *Alston*, 141 S. Ct. at 2156 (quoting *Leegin*, 551 U.S. at 886–87).

The parties do not appear to seriously contest that the Court should apply the rule of reason standard to the challenged restraints. The Direct Action Plaintiffs and the Equitable Relief Class Plaintiffs do not claim that this is a case of *per se* unlawful conduct and do not dispute that the rule of reason applies. (DAP’s *Amex* Opp’n 12, 13 & n.10; ERCP’s *Amex* Opp’n 2.) Plaintiffs acknowledge that they bear the initial burden of demonstrating that the challenged

rules have anticompetitive effects. (DAP's *Amex* Opp'n 12, 13; ERCP's *Amex* Opp'n 2.) In addition, *Amex* may require a rule of reason analysis for assessing alleged competitive harms in two-sided transactions markets.¹⁴ 138 S. Ct. at 2287 ("Evaluating both sides of a two-sided transaction platform is also necessary to accurately assess competition."). What may appear anticompetitive on one side of the market may in fact be procompetitive on the other side, and vice-versa. Earlier in this litigation, Judge Gleeson suggested that the challenged restraints should be assessed under the rule of reason. *Interchange Fees I*, 986 F. Supp. 2d at 227 ("[T]he setting of default interchange fees would almost certainly be evaluated under the Rule of Reason."), *rev'd and vacated on other grounds*, 827 F.3d 223 (2d Cir. 2016).

In addition, Visa and Mastercard were initially established as joint ventures and this action began when Visa and Mastercard were still collectively owned by their issuing bank members. *See Barry's Cut Rate Stores*, 2019 WL 7584728, at *3. The challenged restraints were also first implemented when Visa and Mastercard were organized as bank collectives.¹⁵ As relevant here, the Supreme Court and the Second Circuit have both suggested that the activities of joint ventures are to be evaluated under the rule of reason. *Am. Needle, Inc. v. NFL*, 560 U.S.

¹⁴ The Court assumes, without deciding, that this is true at least insofar as the present litigation is concerned. It is possible that the Supreme Court would not demand application of the rule of reason if confronted with evidence that two (or more) transactions platforms (*e.g.*, Uber and Lyft) conspired to fix prices or divide markets. *See, e.g., In re Delta Dental Antitrust Litig.*, 484 F. Supp. 3d 627, 637 (N.D. Ill. 2020) (explaining that *Amex* would not foreclose a claim that a horizontal restraint between competitors in a two-sided market could be anticompetitive *per se*).

¹⁵ *See Amex*, 138 S. Ct. at 2282; (Direct Action Pls.' R. 56.1 Counter-stmt. ("DAP's Counter 56.1") ¶¶ 4–8, 12–15, Docket Entry No. 8196). Prior to the IPOs, the issuing banks owned and controlled Visa and Mastercard and collectively adopted the HAC Rules. (Defs.' 56.1 ¶¶ 8–9, 57–58, 186; DAP's Counter 56.1 ¶¶ 78–91.) After Mastercard's IPO in 2006 and Visa's IPO in 2008, each network effectively readopted the same HAC Rules and "default" interchange rules. (Defs.' 56.1 ¶¶ 38, 57–58, 186–87; DAP's Counter 56.1 ¶¶ 609–27.)

183, 201–03 (2010); *Starr v. Sony BMG Music Ent.*, 592 F.3d 314, 327 (2d Cir. 2010) (citing *Dagher*, 547 U.S. at 6 n.1). As such, at least the pre-IPO period should be evaluated under the rule of reason, and the Court sees no compelling reason to apply the rule of reason standard to the pre-IPO period and a different standard to the post-IPO period.

Plaintiffs obliquely suggest that the case should be assessed under either the *per se* or quick look standard. For example, Plaintiffs frequently refer to the challenged restraints as “horizontal restraints on price competition,” (*see, e.g.*, DAP’s *Amex* Opp’n 1), or as “fixing [a] component of the total transaction price,” (*id.* at 13 (emphasis omitted)). They then suggest that “[h]orizontal agreements that fix a component of total price satisfy a plaintiff’s prima facie burden to show harm to competition.” (Target Pls.’ Suppl. Mem. 9 (citing *1-800 Contacts*, 1 F.4th at 114–15, explaining that horizontal price-fixing is ordinarily subject to *per se* review); DAP’s *Amex* Opp’n 13 (“The evidence that Visa’s and Mastercard’s challenged rules are *agreements among horizontal competitors* with the purpose and effect of *fixing one component of the total transaction price* is sufficient, by itself, to meet the Direct Action Plaintiffs’ initial burden of showing harm to competition under the Rule of Reason analysis.”).) In support, Plaintiffs cite *O’Bannon v. NCAA*, 802 F.3d 1049, 1070–72 (9th Cir. 2015) and *United States v. Apple, Inc.*, 791 F.3d 290, 329 (2d Cir. 2015).

Plaintiffs’ reliance on *O’Bannon* is misplaced — they reverse the cause and effect. The challenged rules at issue in *O’Bannon* did not satisfy the plaintiffs’ initial burden simply *because* they were horizontal restraints and affected an aspect of price; rather, a detailed factual record supported the finding that the challenged rules had “a significant anticompetitive effect on the college education market” and *therefore* satisfied the plaintiffs’ initial burden. 802 F.3d at 1070–71. The Ninth Circuit also credited the district court’s finding that “student-athletes themselves

[were] harmed by the price-fixing agreement among FBS football and Division I basketball schools.” *Id.* at 1072 (quoting *O’Bannon v. NCAA*, 7 F. Supp. 3d, 955, 972–73 (N.D. Cal. 2014)). That is, the district court — reviewing all the evidence — found that the challenged restraints caused actual anticompetitive effects in the market. *See O’Bannon*, 7 F. Supp. 3d at 971–73. The mere existence of a horizontal restraint that affects an aspect of price is not by itself sufficient to satisfy a plaintiff’s initial burden under the rule of reason.

Likewise, *Apple* does not provide much support for Plaintiffs’ argument. *Apple* involved a hub-and-spoke price-fixing conspiracy between Apple and six of the largest publishing houses.¹⁶ *Apple*, 791 F.3d at 314–20. Primarily, the Second Circuit affirmed the district court’s application of the *per se* standard to the challenged agreements. *Id.* at 321–25. As the Second Circuit explained, the Supreme Court and the Courts of Appeals frequently apply the *per se* standard to hub-and-spoke conspiracies. *Id.* at 322–23. Application of the *per se* standard in *Apple*, therefore, does not address whether Plaintiffs have satisfied their initial burden under the rule of reason.¹⁷

¹⁶ *See Apple*, 791 F.3d at 314 (“[C]ourts have long recognized the existence of ‘hub-and-spoke’ conspiracies in which an entity at one level of the market structure, the ‘hub,’ coordinates an agreement among competitors at a different level, the ‘spokes.’ These arrangements consist of *both* vertical agreements between the hub and each spoke and a horizontal agreement among the spokes ‘to adhere to the [hub’s] terms,’ often because the spokes ‘would not have gone along with [the vertical agreements] except on the understanding that the other [spokes] were agreeing to the same thing.’” (citations omitted)).

¹⁷ Chief Judge Debra Livingston, writing only for herself, also evaluated the challenged agreements under the abbreviated “quick look” version of the rule of reason analysis. *See Apple*, 791 F.3d at 329; *id.* at 321 (“I also consider, writing only for myself, Apple’s rule-of-reason argument.”) The “quick look” approach “effectively relieves the plaintiff of its burden of providing a robust market analysis by shifting the inquiry directly to a consideration of the defendant’s procompetitive justifications.” *Id.* at 330 (citations omitted). However, a quick look was appropriate only because the court was “easily able to discern the anticompetitive effects of the horizontal conspiracy.” *Id.* Because Plaintiffs effectively concede that the Court should (or

As a general matter, however, horizontal restraints — that is, agreements between competitors at the same level of the supply chain, *e.g.*, between two manufacturers or two distributors — are inherently more suspect than agreements between, for example, a manufacturer and one of its distributors. *See Leegin*, 551 U.S. at 888 (“[H]orizontal restraints are generally less defensible than vertical restraints.” (quoting *Arizona v. Maricopa Cnty. Med. Soc’y*, 457 U.S. 332, 348 n.18 (1982))); *Bus. Elecs. Corp. v. Sharp Elecs. Corp.*, 485 U.S. 717, 724 (1988) (“Vertical nonprice restraints . . . ha[ve] real potential to stimulate interbrand competition.” (citing *N. Pac.*, 356 U.S. at 5)). A horizontal agreement to fix prices or restrict output is the quintessential antitrust violation and “the paradigm of an unreasonable restraint of trade.” *NCAA v. Oklahoma*, 468 U.S. at 100. However, not all horizontal price-fixing arrangements are unlawful, especially where, as in *NCAA v. Oklahoma* and *Broadcast Music*, the restraint is necessary for the product to exist at all. *NCAA v. Oklahoma*, 468 U.S. at 100 (“[W]hat is critical is that this case involves an industry in which horizontal restraints on competition are essential if the product is to be available at all.”); *Broad. Music, Inc. v. Columbia Broad. Sys., Inc.*, 441 U.S. 1, 23 (1979) (“Joint ventures and other cooperative arrangements are also not usually unlawful, at least not as price-fixing schemes, where the agreement on price is necessary to market the product at all.”).

Even if the Court accepts that the restraints are horizontal, Plaintiffs’ assertion that the challenged restraints “satisfy [their] prima facie burden to show harm to competition” *because* they are horizontal, (Target Pls.’ Suppl. Mem. 9), is incorrect as a matter of law. When the court

must) apply the rule of reason, the Court does not further discuss whether a quick look approach is appropriate in this case. (*See* DAP’s *Amex* Opp’n 13 n.10 (“Direct Action Plaintiffs are not asking the Court to condemn the restraints in question per se, or apply that rule to this motion.”); ERCP’s *Amex* Opp’n 2 (“Proving any one of [the *Amex* elements] meets [P]laintiffs’ initial burden under the rule of reason.”).)

in *NCAA v. Oklahoma* applied the rule of reason, for example, it did not give plaintiffs a “free pass” at the first stage of the burden shifting framework. Assessing the NCAA’s restraints on the television broadcasting of college football games, the district court found that output would have been higher and that prices would have been lower in the absence of the challenged restraints — precisely what Plaintiffs here are tasked with showing. *NCAA v. Oklahoma*, 468 U.S. at 105 (“The District Court found that if member institutions were free to sell television rights, many more games would be shown on television, and that the NCAA’s output restriction has the effect of raising the price the networks pay for television rights.”).

The Court acknowledges that there is a colorable argument that the challenged restraints amount to horizontal agreements among competitors to fix an aspect of price, but the Court also recognizes that these restraints are (or were) likely necessary for the credit- and debit-card transactions markets to exist as ubiquitously as they do today.¹⁸ Nevertheless, because the Court has decided to apply the rule of reason, it need not determine at this time whether the challenged restraints are, in fact, horizontal as Plaintiffs assert or vertical as Defendants argue. Even assuming the restraints are horizontal, market realities in the credit- and debit-card transactions markets are sufficiently similar to the markets in *Broadcast Music* and *NCAA v. Oklahoma* for the Court to have “some doubt — enough to counsel against application of the *per se* rule — about the extent to which [the challenged restraints] threaten[] the ‘central nervous system of the economy.’” *Broad. Music*, 441 U.S. at 23 (quoting *United States v. Socony-Vacuum Oil Co.*, 310 U.S. 150, 226 n.59 (1940)).

¹⁸ See *In re Am. Express Anti-Steering Rules Antitrust Litig.*, 19 F.4th at 135 (“New entrants face a ‘chicken-and-egg’ problem because merchants value a payment system only if a sufficient number of cardholders use it and cardholders value a payment card only if a sufficient number of merchants accept it.” (internal quotation marks and footnote omitted)).

Accordingly, the Court will evaluate the challenged restraints using the rule of reason framework. Consistent with *Amex*, Plaintiffs must show either direct evidence of anticompetitive effect, such as “reduced output, increased prices, or decreased quality in the relevant market,” or indirect evidence of anticompetitive effect, which “would be proof of market power plus some evidence that the challenged restraint harms competition.” 138 S. Ct. at 2284. The Court, therefore, begins by defining the relevant market because “courts usually cannot properly apply the rule of reason without an accurate definition of the relevant market.” *Id.* at 2285.

d. Market definition

Under the federal antitrust laws, a product market is “composed of products that have reasonable interchangeability” from the perspective of the relevant consumer with the product sold by the defendant firm. *See United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377, 404 (1956); *Geneva Pharms.*, 386 F.3d at 496 (“The relevant market is defined as all products ‘reasonably interchangeable by consumers for the same purposes,’ because the ability of consumers to switch to a substitute restrains a firm’s ability to raise prices above the competitive level.” (citation omitted)); *Xerox Corp. v. Media Scis., Inc.*, 660 F. Supp. 2d 535, 543 (S.D.N.Y. 2009) (“[P]roducts constitute part of a single product market if they are ‘reasonably interchangeable by consumers for the same purposes,’ such that there is high cross-elasticity of demand for the products.” (citation omitted)). This factual determination requires the court to be cognizant of the “commercial realities” faced by a defendant’s consumers, *see Eastman Kodak*, 504 U.S. at 482 (citation omitted); *Brown Shoe*, 370 U.S. at 336, and to consider the various factors that might influence consumers’ choice to switch to a substitute product, including functional interchangeability, price, and quality, *see E.I. du Pont de Nemours*, 351 U.S. at 401–04; *United States v. Visa U.S.A, Inc.*, 163 F. Supp. 2d 322, 335 (S.D.N.Y. 2001) (“*Visa I*”). By

identifying the range of reasonably interchangeable substitute products, a court can “identify the market participants and competitive pressures that restrain an individual firm’s ability to raise prices or restrict output” and better assess the competitive dynamics in which the defendant firm and challenged restraint operate. *Geneva Pharms.*, 386 F.3d at 496; *Balaklaw v. Lovell*, 14 F.3d 793, 799 (2d Cir. 1994) (“The basic principle is that the relevant market definition must encompass the realities of competition.” (internal citation and quotation marks omitted)).

Plaintiffs assert, and Defendants do not contest, that the relevant markets are the markets for general purpose credit-card and debit-card transactions. (See 7-Eleven Compl. ¶¶ 242–44; Home Depot Compl. ¶¶ 191–213; Target Compl. ¶ 86; Equitable Relief Class Compl. ¶¶ 338, 352; Defs.’ *Amex* Mem. 2 n.2 (“For the purposes of this summary judgment motion only, Defendants accept Plaintiffs’ allegation that if the relevant markets are two-sided, they consist of a credit transaction market and a debit transaction market.”).) As *Amex* instructs, “courts must include both sides of the platform — merchants and cardholders — when defining the credit-card market.” 138 S. Ct. at 2286. Plaintiffs’ experts contend that the relevant markets are the two-sided transactions markets for credit-card and debit-card transactions. (See, e.g., Defs.’ 56.1 ¶¶ 77–78, 82–84; Expert Rep. of Prof. Dennis W. Carlton (“Carlton Rep.”) ¶¶ 128–36, annexed to Szanyi Decl. as SJDX386, Docket Entry No. 8526-11; Harris Rep. ¶ 49.) As Defendants do not contest this admissible evidence, (see Defs.’ *Amex* Mem. 15), the Court accepts the parties’ relevant markets for purposes of this motion.

e. Elements of Plaintiffs’ prima facie case

A plaintiff may make the requisite showing under the first step of the rule of reason analysis with either direct or indirect evidence. Under *Amex*, plaintiffs can show anticompetitive effects in the relevant market through direct evidence of increased transaction prices, of reduced

output, or that the restraints “otherwise stifled competition.” 138 S. Ct. at 2287. As the Second Circuit stated in *1-800 Contacts*, direct evidence must be “empirical”; “theoretical [or] anecdotal evidence . . . is not ‘direct.’” 1 F.4th at 118; *see also Brooke Grp.*, 509 U.S. 209.¹⁹ In addition, “expert testimony rooted in hypothetical assumptions cannot substitute for actual market data.” *Virgin Atl. Airways Ltd. v. British Airways PLC*, 257 F.3d 256, 264 (2d Cir. 2001).²⁰

¹⁹ The parties submitted supplemental briefing in August of 2023 on the applicability of *Brooke Group* and *Virgin Atlantic* to the instant litigation. (*See supra* note 9.) The Court addresses the parties’ *Brooke Group* arguments here and the *Virgin Atlantic* arguments in the following footnote.

The Target Plaintiffs contend *Brooke Group* is inapposite because it was a predatory pricing case, (Target Pls.’ Suppl. Mem. 2), and because the *Brooke Group* experts’ evidentiary shortcomings are distinguishable from the analyses conducted by the experts in this case, (*id.* at 3). Plaintiffs also note that the record evidence in *Brooke Group* did not lend itself to the “reasonable inference that output would have been greater without Brown & Williamson’s entry into the [market].” (DAP-ERCP’s Suppl. Mem. 16 (quoting *Brooke Grp.*, 509 U.S. at 237).) Defendants argue that expert testimony “is useful as a guide to interpreting market facts, but . . . is not a substitute for them.” (Defs.’ Suppl. Reply 8 (quoting *Brooke Grp.*, 509 U.S. at 242).) Defendants also argue that *Brooke Group* cautions against drawing impermissible inferences from ambiguous market data. (*Id.* at 7–8.)

The Court agrees with Defendants that *Brooke Group* is not inapplicable merely because the allegations involved below-competitive prices rather than supracompetitive prices. *Brooke Group*, however, provides very little support for Defendants’ position beyond affirming the principles and precedents the Court applies in this case — *Amex* demands “direct evidence” of harm to competition or “indirect evidence” in the form of market power plus “some evidence” tending to show anticompetitive effect. 138 S. Ct. at 2284. *Brooke Group* directs courts to reject antitrust cases relying on mere theory or speculation, thus laying the groundwork for *Amex*. 509 U.S. at 234 (speculation); *id.* at 242 (theory) (“When an expert opinion is not supported by sufficient facts . . . it cannot support a jury’s verdict.”). *Matsushita* counsels against drawing impermissible inferences from ambiguous evidence. 475 U.S. at 594. In *Brooke Group*, the Court reiterated that evidence of lower prices is just as likely (if not more likely) to reflect the desirable operation of competitive market forces as it is to reflect illegal conduct. 509 U.S. at 224–26.

²⁰ Plaintiffs contend that *Virgin Atlantic* is distinguishable because “Virgin d[id] not submit any data” in support of its claimed anticompetitive effects, (DAP-ERCP’s Suppl. Mem. 16), and because the case involved predatory pricing, (Target Pls.’ Suppl. Mem. 2). Defendants argue that *Virgin Atlantic* requires Plaintiffs to base their case on “actual market data,” rather than “hypothetical assumptions.” (Defs.’ Suppl. Reply 1 (internal quotation marks omitted).)

i. Direct evidence

In *US Airways*, the Second Circuit considered the evidence a plaintiff would have to show in a case involving a two-sided transaction market in order to survive a motion for summary judgment.²¹ *US Airways* concerned an antitrust suit against Sabre, which owned and operated a “global distribution system: an electronic network that travel agents use to search for and book airline flights for their customers.” 938 F.3d at 49. Shortly before the case went to

As the Target Plaintiffs observe, the Supreme Court has been skeptical of predatory pricing cases, questioning whether a competitor would ever successfully be able to recoup its losses after a period of below-cost sales. *See Matsushita*, 475 U.S. at 588–93 (discussing obstacles to successful predatory pricing conspiracy). Thus, evidence of conduct “as consistent with permissible competition as with illegal conspiracy” is insufficient for a plaintiff to survive a motion for summary judgment. *Id.* at 588. Plaintiffs insist, without support, that the *Matsushita* standard applies only to predatory pricing cases. (*See* Target Pls.’ Suppl. Mem. 2 n.2 (“In below-cost pricing cases, courts have followed the rule first articulated in *Matsushita* . . .”).) The Court disagrees. It is possible, even in a case alleging horizontal restraints, that certain inferences may be equally probative of competition as of conspiracy. In such a case, those inferences — without more — would be insufficient as a matter of law. Moreover, courts in this circuit, including the Second Circuit, routinely apply *Matsushita* to cases that do not involve predatory pricing. *See, e.g., Anderson News, LLC, v. Am. Media, Inc.*, 899 F.3d 87, 98 (2d Cir. 2018) (group boycott); *In re Publ’n Paper Antitrust Litig.*, 690 F.3d 51, 64 (2d Cir. 2012) (horizontal price-fixing conspiracy).

There is little difference between Plaintiffs’ contention that “Virgin d[id] not submit any data” in support of its claimed anticompetitive effects, (DAP-ERCP’s Suppl. Mem. 16), and Defendants’ position that “expert testimony rooted in hypothetical assumptions cannot substitute for actual market data,” (Defs.’ Suppl. Reply 8–9 (quoting *Virgin Atl.*, 257 F.3d at 264)). Both sides are correct. Virgin Atlantic’s failure to conduct a before-and-after assessment of ticket prices makes the case similar to *1-800 Contacts* — that is, economic theory, without more, is insufficient to survive a motion for summary judgment. Beyond unsupported allegations of a 14% reduction in price on routes in which British Airways competed with Virgin Atlantic, Virgin’s case was largely theoretical. 257 F.3d at 264. The Court therefore agrees with Defendants that *Virgin Atlantic* requires that Plaintiffs produce market data indicating anticompetitive effect in the market, but disagrees with Defendants’ arguments suggesting that no expert hypotheses or inferences may be used to support the conclusions to be drawn from the market data.

²¹ Although *US Airways* was decided on a Rule 50 motion following trial, rather than on a motion for summary judgment, the case is instructive because, as the Supreme Court noted in *Anderson v. Liberty Lobby, Inc.*, the “standard [for summary judgment] mirrors the standard for a directed verdict” under Rule 50. 477 U.S. at 250.

trial, the Supreme Court issued its decision in *Amex*, which addressed “when [a] relevant market is to be considered ‘two-sided,’ *i.e.*, when the effects of a challenged restraint on a market are to be judged by the net impact on customers on both sides, not either side, of a market.” *Id.* at 52–53 (citing *Am. Express II*, 838 F.3d at 186, 198–200). On appeal, the Second Circuit noted that, in a two-sided market, “prices would be supracompetitive only to the extent that the net prices charged to travel agents . . . and airlines . . . *combined* exceeded the prices that would have been charged in a competitive market.” *Id.* at 59.

US Airways illustrates the type of evidence that would satisfy a plaintiff’s burden. There, the court found sufficient evidence of supracompetitive prices where there was empirical evidence that Sabre’s profits were much higher than those of comparable companies, and that — based on a comparison of actual fees Sabre charged US Airways and fees Sabre would have to charge to in order to earn a reasonable profit (a reasonable booking fee) — Sabre was charging three times as much as it would have in a competitive market. *Id.* at 61. In addition, “[a]ccording to the evidence presented at trial . . . no new competitors ha[d] entered the technologically stagnant [product] market in some thirty years despite a return on investment to the participants in that market that [was] strikingly high, even after accounting for the incentive payments to the travel agents . . . as required in analyzing harm in a two-sided platform.” *Id.* at 60.

The Second Circuit pointed to the following testimony and evidence to conclude that “it would have been reasonable for jurors to have concluded that US Airways had met its burden” under *Amex*: First, US Airways’ expert, Professor Joseph Stiglitz offered evidence of two-sided harm by taking “travel agency incentives into account by reinserting the incentive payment costs into [another expert’s] reasonable profit booking fee.” *Id.* at 61–62. After adjusting for a two-

sided market analysis, Stiglitz opined that the market “is noncompetitive, a highly noncompetitive two-sided market, [and] the returns are considerably in excess of normal market returns.” *Id.*

Second, according to the court, US Airways also introduced evidence of market harms beyond supracompetitive pricing, noting that the jury heard from both fact and expert witnesses “that the contractual restraints made entry into the marketplace ‘extraordinarily difficult,’” reduced the quality of options available in the marketplace, and led to technological stagnation. *Id.* (citation omitted). The court pointed to testimony referring to the inferior quality of the software’s user interface, that the platform was “virtually identical” to the version in use thirty years prior, and that potential competitors with superior software had tried to enter the market but were unable to do so. *Id.* at 62–63. The court observed these quality issues “impact[ed] both the travel-agent side of the platform and the airline side.” *Id.* at 63.

The Second Circuit described this record, taken together, as an “apparent mountain of evidence” that warranted denying Sabre’s motion for judgment as a matter of law. *Id.* The court, moreover, distinguished the record before it from the record before the Supreme Court in *Amex*:

[T]he [Supreme] Court made clear that “the plaintiffs in the case before it did not offer any evidence that price of credit-card transactions was higher than the price one would expect to find in a competitive market.” That is in stark contrast to the evidence here that the fees charged by Sabre to airlines were indeed greater than a competitive market would have provided, even after discounting the travel agent incentive payments.

Id. (citation omitted).

In *1-800 Contacts*, the Second Circuit briefly addressed the forms that “direct evidence” of anticompetitive effects can take, explaining for example that “[w]hen an antitrust plaintiff advances an antitrust claim based on direct evidence in the form of increased prices, the question

is whether it can show an actual anticompetitive change in prices after the restraint was implemented.” 1 F.4th at 118 (citing *Brooke Grp.*, 509 U.S. at 236–37).²²

Relying on the language, “after the restraint was implemented,” Defendants contend that the only way for an antitrust claimant to succeed at the first step of the rule of reason analysis is to show an “‘actual anticompetitive change’ in price, output, or quality” — in other words, that Plaintiffs must assess the changes in the market *after* the challenged restraints were implemented. (Defs.’ Suppl. Reply 4 (quoting *1-800 Contacts*, 1 F.4th at 118).) Plaintiffs argue that this standard sets an impossibly high bar, given that “the challenged restraints were *created* simultaneously with the payment products in question.” (Target Pls.’ Suppl. Mem. 10.) In *1-800 Contacts*, by contrast, the allegedly anticompetitive agreements were imposed long after the market was well established, allowing for the “before and after” comparison Defendants argue is required. (*Id.*) Defendants dismiss Plaintiffs’ argument as meritless, even though — as Defendants agree — “[m]ost of the challenged rules, including Honor All Cards, have been in place since the inception of the defendant networks.” (Defs.’ Suppl. Reply 6.) Nevertheless, Defendants contend that Plaintiffs can readily carry out a “before and after” comparison because the challenged restraints were implemented at “a time when no plaintiff asserts that Visa or Mastercard had market power — and therefore ‘before’ any conduct could have been unlawful.” (*Id.*)

While this reasoning has some intuitive appeal, Defendants’ reading of *1-800 Contacts* is too expansive. Both *1-800 Contacts* and *MacDermid Printing Solutions LLC v. Cortron Corp.*,

²² The *1-800 Contacts* court had no need to explain its reasons for finding the FTC’s evidence of anticompetitive effect “theoretical and anecdotal,” concluding instead that the defendant had met its burden at the second step of the rule of reason analysis while the FTC failed to carry its burden at the third step. 1 F.4th at 118–19.

833 F.3d 172 (2d Cir. 2016) — on which *I-800 Contacts* relied to set its standard for “direct evidence” — involved circumstances in which the Second Circuit considered a time “before” the challenged restraints were implemented, not a time “before” the antitrust defendant had market power. Indeed, “[d]irect evidence of anticompetitive effects establishes a prima facie case of a Sherman Act Section 1 violation and obviates the need for a . . . showing of market power.” *I-800 Contacts*, 1 F.4th at 117. The market for contact lenses existed prior to the settlement agreements that the FTC challenged as violations of antitrust laws in *I-800 Contacts*, 1 F.4th at 110–11, just as the market for thermal flexographic processors in *MacDermid* had existed since 2000, while the alleged antitrust conspiracy began in 2008, 833 F.3d at 178–80. In this case, however, all parties agree that the challenged restraints have been in place since the creation of the market. (DAP-ERCP’s Suppl. Mem. 15; Target Pls.’ Suppl. Mem. 10; Defs.’ Suppl. Reply 6.) Extending the reasoning of *I-800 Contacts* to apply to all antitrust claims, including those in which the challenged restraints have been in existence for as long as the markets have existed, would create an insurmountable hurdle for potential antitrust plaintiffs in such cases while also creating perverse incentives for aspiring cartel managers.

In addition, Defendants’ reading of *I-800 Contacts* contravenes established antitrust cases like *NCAA v. Oklahoma*, 468 U.S. at 85, relied on by Plaintiffs. (DAP’s *Amex* Opp’n 33–36; DAP-ERCP’s Suppl. Mem. 15; *see also* ERCP’s *Amex* Opp’n 25 n.148.) In *NCAA v. Oklahoma*, the Supreme Court considered the NCAA’s rules limiting the number of televised intercollegiate football games and setting rules for the amount of compensation member institutions can receive for the sale of television rights. 468 U.S. at 105–06. In finding that the rules had anticompetitive effect, the Court relied on, for example, the district court’s finding that many more games would have been televised if member institutions were free to sell their rights

to televise NCAA games. *Id.* at 107 (“Price is higher and output lower than they would otherwise be.”). In *United States v. Visa U.S.A., Inc.*, also cited by Plaintiffs, the Second Circuit rejected Visa and Mastercard’s argument that simply because Amex and Discover “c[ould] get their products to consumers,” the challenged restraints caused no harm to competition. 344 F.3d 229, 242 (2d Cir. 2003) (“*Visa II*”). Rather, the court focused on whether Amex and Discover would have been able to compete for bank contracts *absent* the challenged rules. *Id.* at 241–43; *see also Conwood Co. v. U.S. Tobacco Co.*, 290 F.3d 768, 789–90 (6th Cir. 2002) (finding that the plaintiff had established that output would have been greater in a but-for world notwithstanding that output in the product market had grown over the relevant period).

Plaintiffs can satisfy their burden if they can prove that output would have been greater — or price lower — in the but-for world. Defendants are correct that the *Amex* Court noted that output increased and did not address whether output would have increased at a greater rate in a but-for world, but the plaintiffs in *Amex* based their entire argument on pass-through rates and supracompetitive pricing. 138 S. Ct. at 2288–89. The *Amex* plaintiffs did not argue that output would have been greater in the but-for world, nor did they address output at all. *Id.*; *see also id.* (explaining that plaintiffs could satisfy their burden by showing that price was higher or output lower than “one would expect to find in a competitive market”). While it is true that courts will often look to whether output has increased or decreased in evaluating the anticompetitive effects of the restraint, rather than comparing to what the output would be in a but-for world, that is because the parties in those cases did not advance an argument or establish that the increase in output would have been greater in a but-for world. *See, e.g., id.* at 2288–89; *Buccaneer Energy (USA) Inc. v. Gunnison Energy Corp.*, 846 F.3d 1297, 1312 (10th Cir. 2017); *Major League Baseball Properties, Inc. v. Salvino, Inc.*, 542 F.3d 290, 325–26 (2d Cir. 2008). The standard set

forth in *I-800 Contacts*, therefore, is one way of showing anticompetitive effect by direct evidence, but it is not the only way.

Separately, the Second Circuit in *I-800 Contacts* suggested that direct evidence must be “empirical,” and that “theoretical [or] anecdotal evidence . . . is not ‘direct.’” 1 F.4th at 118. The Court further examines the Second Circuit’s statement that “[e]mpirical evidence is . . . required under our caselaw to find direct evidence of an anticompetitive effect.”²³ *Id.* at 118 n.11 (citing *K.M.B. Warehouse Distribs., Inc. v. Walker Mfg. Co.*, , 61 F.3d 123, 127 (2d Cir. 1995)). *K.M.B. Warehouse* referenced the concept of “empirical” evidence once, in passing, to highlight the insufficiency of the “isolated statements of preference” in the relevant market that the antitrust plaintiffs in that case had relied upon to show harm to competition. 61 F.3d at 128. Identifying what would constitute sufficiently “empirical” evidence in this case therefore requires turning to other sources.

The definition of empirical is “[o]f, relating to, or based on experience, experiment, or observation.” *Empirical*, Black’s Law Dictionary (11th ed. 2019). Strictly speaking, however, anecdotal evidence is empirical because anecdotal evidence is “based on . . . observation.” *Id.* One definition of anecdotal is as follows: “Of evidence (usually medical or scientific): consisting of, or based on, reports of individual cases rather than systematic research or analysis.” *Anecdotal*, Oxford English Dictionary (2020 rev.), <https://doi.org/10.1093/OED/1092203204> (last modified July 2023). The Court, therefore, interprets the *I-800 Contacts* standard as experts’ claims and conclusions based on “reports of

²³ For the reasons discussed above, a “before and after” analysis cannot be required in all cases to show harm to competition, especially where, as here, the evidence is not susceptible to a pre-post analysis. Accordingly, the term “empirical” must encompass more than just “before and after” analyses.

individual cases” are anecdotal, while experts’ claims and conclusions based on “systematic research or analysis” of “experience, experiment, or observation” are empirical.

Theoretical evidence, meanwhile, is defined as “relating to, based on, or consisting of theory, rather than observation of facts,” and includes evidence that “exist[s] chiefly or only in theory rather than in fact.” *Theoretical*, Oxford English Dictionary (2015 rev.), <https://doi.org/10.1093/OED/4311209686> (last modified July 2023). “[E]xpert testimony rooted in hypothetical assumptions cannot substitute for actual market data.” *Virgin Atlantic*, 257 F.3d at 264. However, to the extent the experts’ claims and conclusions are based on “actual market data” — assessed and analyzed through the lenses of the experts’ training and experience — such evidence cannot be dismissed as theoretical even if the experts have applied the gloss of economic theory to predict what might happen in an unobservable but-for world. Expert testimony is not to be discarded as theoretical unless it exists chiefly or only in theory. To analogize, the Hawk-Eye line calling system used at the U.S. Open, for example, does not actually observe whether the ball is in or out; rather it uses a matrix of cameras to assess the ball’s speed, spin, and trajectory to make a projection about where the ball will land in the future. *See, e.g.*, Robert Wood, “Hawk-Eye Line-Calling System,” Topend Sports, <https://www.topendsports.com/sport/tennis/hawkeye.htm> (last visited Dec. 27, 2023). Thus, the system combines “actual market data” with theories derived from the laws of physics to make predictions, but such evidence would likely be regarded as empirical and would not be rejected as relying on speculation or conjecture.

The Court notes, however, that evidence that the restraints “otherwise stifled competition” may be impossible to show “empirically.” In this context, the Court interprets evidence that no new entrants entered the market in three decades, for example, as empirical, but

testimony that a potential competitor was dissuaded from entering the market as *anecdotal*, and therefore insufficient under *I-800 Contacts*.

For the reasons discussed below, (*see infra* Section II.f), the Court finds that Plaintiffs have adduced sufficient direct evidence of anticompetitive effect to defeat Defendants' summary judgment motion.

ii. Indirect Evidence

Indirect evidence of anticompetitive effect requires a showing of market power "plus some evidence" that the challenged conduct has tended to harm competition. *Amex*, 138 S. Ct. at 2284. No court has defined precisely what quantum of evidence is necessary to satisfy the "plus some evidence" standard under the indirect approach.²⁴ Decisions prior to *Amex* suggested that a showing of market power, without more, was sufficient to meet a plaintiff's initial burden. *See, e.g., Tops Mkts.*, 142 F.3d at 96 (noting that the plaintiff "could have demonstrated 'adverse effect' indirectly by establishing that [the defendant] had sufficient market power to cause an adverse effect on competition"). Post-*Amex*, it is clear that more is required. *See Giordano v. Saks Inc.*, 654 F. Supp. 3d. 174, 205 (E.D.N.Y. Feb. 1, 2023) (noting that "market power is but a surrogate for detrimental effects" and that market power must be shown in conjunction with "some other ground" for believing the challenged behavior could harm competition). Though the Second Circuit in *I-800 Contacts* expressly declined to find anecdotal or theoretical evidence sufficient to establish a direct case for anticompetitive effect, 1 F.4th at 118, such evidence is not

²⁴ While "[Second Circuit] cases suggest that it is possible, at least in theory, to prove that a challenged action harmed competition without offering evidence of higher prices, reduced output, or reduced quality," the Second Circuit has "never explained, however, what such proof would look like." *MacDermid Printing Sols. LLC*, 833 F.3d at 183. "[P]roving an adverse effect on competition without showing increased price, reduced output, or reduced quality in the market has remained possible in theory but elusive in practice." *Id.* at 184.

precluded from supporting an indirect case, *see, e.g., Eastman Kodak*, 504 U.S. at 488 (Scalia, J., dissenting) (“Where a defendant maintains substantial market power, his activities are examined through a special lens: Behavior that might otherwise not be of concern to the antitrust laws — or that might even be viewed as procompetitive — can take on exclusionary connotations when practiced by a monopolist.”).

As noted above, the Court finds that Plaintiffs’ evidence suffices to raise a triable issue of fact as to whether they have met their prima facie burden through *direct* evidence of anticompetitive effect. This same evidence also satisfies the lower standard of “some evidence” tending to show harm to competition, as required to meet Plaintiffs’ prima facie burden through *indirect* evidence of anticompetitive effect — provided that Plaintiffs show that Defendants possess market power. Because a finding of market power is necessary for Plaintiffs to prevail based on indirect evidence alone, the Court first discusses Defendants’ market power before turning to the voluminous record of evidence tending to show harm to competition.

iii. Market power

In the antitrust context, market power has two meanings. In the Section 1 context, market power is “the ability to raise prices above those that would be charged in a competitive market.” *NCAA v. Oklahoma*, 468 U.S. at 109 n.38.²⁵ In the Section 2 context, the term “market power” is sometimes used interchangeably with “monopoly power” and is “the power to control prices or exclude competition.” *United States v. Grinnell Corp.*, 384 U.S. 563, 571 (1966) (citation

²⁵ *See also Eastman Kodak*, 504 U.S. at 481 (“[Market power is] the ability of a single seller to raise price and restrict output.”); *K.M.B. Warehouse*, 61 F.3d at 129 (“[Market power is] the ability to raise price significantly above the competitive level without losing all of one’s business.”).

omitted). “Monopoly power under § 2 requires, of course, something greater than market power under § 1.” *Eastman Kodak*, 504 U.S. at 481.

In the credit-card market, courts have looked at market shares, market concentration, and high barriers to entry as evidence of market power. *See Am. Express II*, 838 F.3d at 201; *Visa II*, 344 F.3d at 239. “Market power may be shown by evidence of specific conduct indicating the defendant’s power to control prices or exclude competition,” but “market share may be used as a proxy for market power,” as well. *K.M.B. Warehouse*, 61 F.3d at 129 (citations and internal quotation marks omitted). Under similar facts, the Second Circuit found that Visa and Mastercard possess market power, both individually and jointly. *Visa II*, 344 F.3d at 239.²⁶ In addition, other courts have considered the following factors when assessing market power:

(i) the ability to price discriminate (*i.e.*, to charge different prices to different consumers for the same product), *see, e.g., United States v. Eastman Kodak Co.*, 63 F.3d 95, 106 & n.6 (2d Cir. 1995); *In re Brand Name Prescription Drugs Antitrust Litig.*, 186 F.3d 781, 783 (7th Cir. 1999) (Posner, J.) (“The reason price discrimination implies market power is that assuming the lower of the discriminatory prices covers cost, the higher must exceed cost.”); *Visa I*, 163 F. Supp. 2d. at 340–41 (finding Visa’s and Mastercard’s “ability to price discriminate” by

²⁶ Defendants contend that *Visa II* is irrelevant because it is a pre-*Amex* case in which the court considered only one side of the market. (MC’s Mkt. Pwr. Mem. 12 n.7.) The Court disagrees. The court in *Visa II* defined the relevant market as the market for “network services” and distinguished this market from the markets for cardholder services and merchant services. *Visa II*, 344 F.3d at 239 (“Whereas in the market for general purpose *cards*, the issuers are the sellers, and cardholders are the buyers, in the market for general purpose card *network services*, the four networks themselves are the sellers, and the issuers of cards and merchants are the buyers.”). Based on this definition, the Second Circuit “agree[d] with the district court’s finding that Visa U.S.A. and [Mastercard], jointly and separately, have power within the market for network services.” *Id.*

charging different interchange fees to different categories of merchants “illustrates their market power”);

(ii) the ability to set prices without regard to costs, *Epic Games v. Apple*, 67 F.4th 946, 983 (9th Cir. 2023) (“[A] firm with market power is a price-maker, not the price-taker[] that economic theory expects in a competitive market.”);

(iii) excess or supracompetitive profits, *US Airways, Inc. v. Sabre Holdings Corp.*, No. 11-CV-2725, 2022 WL 1125956, at *9 (S.D.N.Y. Apr. 15, 2022);

(iv) structural barriers to entry, *id.*; and,

(v) the power to “force a purchaser to do something that he would not do in a competitive market,” *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 14 (1984); *see also Epic Games*, 67 F.4th at 982 (describing market power as the “special ability . . . to force [a contracting partner] to do something he would not do in a competitive market” (alterations in original) (quoting *Jefferson Parish*, 466 U.S. at 13–14)).

As Judge Gleeson explained in denying Mastercard’s motion to dismiss, Plaintiffs’ “[s]uccess in proving” (i) price discrimination, (ii) the ability to force merchants to do things they do not want to do (*i.e.*, that they must accept high interchange cards if they accept any Mastercard cards), or (iii) that Mastercard “can set the price of its product without regard to its costs” would suffice to show market power “even in the face of evidence showing that MasterCard’s share of the market is less than 30 percent.” *In re Payment Card Interchange Fee & Merch. Disc. Antitrust Litig.*, 562 F. Supp. 2d 392, 401 (E.D.N.Y. 2008).

Market power is a factual finding, thus the question at this stage is whether a jury could reasonably conclude that Defendants have market power. *See, e.g., Geneva Pharms.*, 386 F.3d at 509–10 (denying summary judgment and finding triable question of fact as to the defendant’s

market power); *Epic Games*, 67 F.4th at 983 (“Whether a defendant possesses market power is a factual question.”).

1. Mastercard’s market power

Mastercard disputes that a jury could conclude that it has sufficient market power to have an adverse effect on competition.²⁷ On the record before the Court, however, a jury could reasonably conclude that Mastercard has market power. In its moving papers, Mastercard makes the following arguments:

First, Mastercard relies primarily on its self-described “low and declining market share” as evidence it “presumptively lacks market power.” (MC’s Mkt. Pwr. Mem. 12–14 (citing *Abbott Lab’ys v. Adelpia Supply USA*, 2018 WL 8967057, at *3 (E.D.N.Y. Aug. 7, 2018) (“Courts have consistently held that firms with market shares of less than 30% are presumptively incapable of exercising market power.”)).) Mastercard, however, mischaracterizes *Abbott*. The clause cited by Mastercard begins: “Where plaintiffs use market share as a proxy for market power” *Abbott Lab’ys*, 2018 WL 8967057, at *3. Plaintiffs do not use market share as a proxy for market power.²⁸ Mastercard also suggests that in *Amex*, the Supreme Court applied “the well-established presumption that firms with less than a 30% market share lack market power” and held that American Express lacked market power when it was the second largest network and had roughly 26% market share. (MC’s Grubhub Mkt. Pwr. Mem. 5; *see also* MC’s

²⁷ While Visa does not concede that it possesses market power, it did not move for summary judgment based on its lack of market power. Therefore, the Court need not address whether Plaintiffs’ evidence suffices to establish Visa’s market power such that Plaintiffs can meet their prima facie burden through indirect evidence. To the extent that Plaintiffs intend to rely on an indirect showing of anticompetitive effect, however, a jury would still need to find that Visa possesses market power.

²⁸ (*See* MC’s Mkt. Pwr. Mem. 5 (listing Plaintiffs’ bases for asserting that Mastercard has market power).) None of Plaintiffs’ allegations rely on Mastercard’s market share.

Mkt. Pwr. Mem. 13–14.) This, too, is a mischaracterization. Although the Supreme Court deemed the evidence before it insufficient to show that Amex “wield[ed] market power to achieve anticompetitive ends,” this finding was not a presumption arising out of Amex’s market share. *See Amex*, 138 S. Ct. at 2288. Rather, the Court noted only once — as background — that Amex had a market share of 26.4%. *Id.* at 2282. Regarding Amex’s market power, the Court said “[the fact that] Amex allocates prices between merchants and cardholders differently from Visa and MasterCard is simply not evidence that it wields market power to achieve anticompetitive ends,” and, low marginal pass-through “does not prove that Amex’s antisteering provisions gave it [market power].” *Id.* at 2288. That is, the Supreme Court found the evidence insufficient to conclude that Amex wielded market power in the two-sided transactions market; this determination was not a finding that, as a matter of law, Amex affirmatively lacked market power. Moreover, the different factual record before the Supreme Court has little bearing on the findings of fact a jury is entitled to make in this case.

The other cases cited by Mastercard are similarly inapposite. *See Jefferson Parish*, 466 U.S. at 27 (affirming that defendant’s “market share *alone* was insufficient as a basis to infer market power”) (emphasis added); *Pearl Brewing Co. v. Miller Brewing Co.*, No. SA 93-CV-205, 1993 WL 424236 (W.D. Tex. Mar. 31, 1993) (denying preliminary injunction to block merger under the Clayton Act).

Second, Mastercard asserts “demonstrating that Mastercard has market power is necessary for plaintiffs to make out a claim against it.”²⁹ (MC’s Mkt. Pwr. Mem. 4.) This

²⁹ Amex made the same argument before the district court in *Am. Express I*. *See* 88 F. Supp. 3d at 169 n.9 (“American Express maintains its position, first articulated in its summary judgment briefing, that Plaintiffs must prove that it possessed market power in the relevant market in order to prevail under Section 1. For the same reasons set forth [previously], the court

argument is contrary to controlling Second Circuit precedent, which clearly states that “[w]e have not required proof of market power in § 1 cases.” *Geneva Pharms.*, 386 F.3d at 509. Rather, if a plaintiff “can demonstrate an actual adverse effect on competition, . . . there is no need to show market power.” *Id.* Similarly, the Supreme Court in *Amex* contemplated a plaintiff satisfying her initial burden with either proof of actual adverse effect on competition *or* proof of “market power plus some evidence that the challenged restraint harms competition.” *Amex*, 138 S. Ct. at 2284.

During the relevant period, Mastercard has consistently had approximately [REDACTED] market share by transaction volume in a market defined by high barriers to entry. (MC’s Mkt. Pwr. Mem. 6 (citing Defs.’ 56.1 ¶¶ 425, 432); DAP’s Counter 56.1 ¶¶ 870, 1044, 1046; MC’s Grubhub Mkt. Pwr. Mem. 5); *see also Geneva Pharms.*, 386 F.3d at 509 (noting existence of high barriers to entry in market power analysis); *In re IBM Peripheral EDP Devices Antitrust Litig.*, 481 F. Supp. 965, 976 (N.D. Cal. 1979) (“The greater the barriers faced by a new entrant, the more probable it is that control of a particular market share would enable defendant to exercise [market] power.”). The credit-card transaction market is highly concentrated and has had no new entrants in nearly forty years. (DAP’s Counter 56.1 ¶ 1046 (“The markets for credit and debit transactions are both highly concentrated.”); *id.* at ¶ 872 (“No firm has successfully launched a general purpose payment card network since Discover in 1985.”); Carlton Rep. ¶ 138 (“[T]he markets for credit card and debit card network services are concentrated . . . and no material entry has occurred for decades.”).) Mastercard contends that none of the evidence supports a finding that it has exercised its market power to restrict output, raise prices, or reduce

rejects this position as inconsistent with clear and binding precedent in this Circuit.” (citing *Tops Mkts.*, 142 F.3d at 98)).

quality. (MC's Grubhub Mkt. Pwr. Mem. 6–13.) For the reasons already discussed, however, triable issues of fact remain as to whether the challenged network rules have these effects. (*See supra* Sections II.e.i–ii.) Mastercard has the ability to price discriminate, (DAP's Counter 56.1 ¶¶ 936, 938; Carlton Rep. ¶ 141), and Mastercard executives have admitted that they do not consider costs when setting prices, (DAP's Counter 56.1 ¶ 299). A jury would be entitled to credit Dr. Harris' anticipated testimony that, "A firm that is able to set price without regard to cost of production is said to have market power." (*Id.* ¶ 180 (quoting Harris Rep. ¶ 623).)

Merchants would like to negotiate for lower interchange rates with Mastercard but are essentially "forced" to accept the rates imposed by the network; and, as Dr. Harris writes in his reply report, "Mastercard's ability to force merchants, through the Honor All Cards rules, to make an all-or-none acceptance decision . . . is also direct evidence of market power." (Expert Reply Rep. of Dr. Robert Harris ("Harris Reply Rep.") ¶ 139 (citing Harris Rep. ¶¶ 61–67), annexed to Szanyi Decl. as SJDX392, Docket Entry No. 8526-12.) In addition, Mastercard has enjoyed consistently high profit margins. (DAP's Counter 56.1 ¶ 268 ("Between 2009 and 2016, the EBITDA margin for Mastercard has ranged from 47% to 60%."); Carlton Rep. ¶ 145 ("[T]he profits of both Visa and Mastercard indicate excess profits . . . [and the] lack of entry in the face of high profits is indicative of durable market power.")) Professor Stiglitz states that "the evidence indicates that there are supracompetitive profits" and price discrimination, indicating the presence of market power. (Expert Rep. of Joseph Stiglitz ("Stiglitz Rep.") ¶ 54, annexed to Szanyi Decl. as SJDX415, Docket Entry No. 8526-19.)

In sum, these indicia of market power require the Court to deny Mastercard's motion for summary judgment as to a lack of market power.

f. Evidence in support of Plaintiffs' prima facie case

Defendants assert that Plaintiffs have failed to make the requisite two-sided showing. The thrust of Defendants' argument is that Plaintiffs have failed to adduce sufficient evidence of increased prices, of reduced output, or that Defendants "otherwise stifled competition" in the two-sided transactions market to meet their burden under the first step of the three-step burden shifting framework. (Defs.' *Amex* Mem. 2–3); *Amex*, 138 S. Ct. at 2287 ("To demonstrate anticompetitive effects on the two-sided credit-card market as a whole, the plaintiffs must prove that [the Defendants' challenged conduct] increased the cost of credit-card transactions above a competitive level, reduced the number of credit-card transactions, or otherwise stifled competition in the credit-card market.").³⁰

Direct Action Plaintiffs argue that they have satisfied their burden to prove competitive harm under *Amex* because they have established that the restraints allow Defendants to charge transaction prices above a competitive level, reduce the number of transactions, and otherwise stifle competition. (DAP's *Amex* Opp'n 15–44.) Equitable Relief Class Plaintiffs argue that they have established that the restraints cause supracompetitive prices, reduce output, create entry barriers, cause inefficient cross-subsidization, and cause other market distortions. (ERCP's *Amex* Opp'n 17–36.).

i. Price

Defendants argue that Plaintiffs have not raised a genuine dispute as to whether the prices in the relevant markets are higher than the prices one would expect to find in competitive

³⁰ The Court has reviewed the extensive record of Local Rule 56.1 Statements, expert reports, reply reports, and depositions. Consistent with the Court's *Daubert* opinions, the Court does not consider Plaintiffs' one-sided evidence which, as a matter of law, cannot assist Plaintiffs in meeting their burden under *Amex*. (See *infra* Section II.g.)

markets because Plaintiffs have not established or even estimated the transaction prices in the but-for world. (Defs.’ *Amex* Mem. 21–23.) Defendants argue that Plaintiffs must offer concrete evidence — “through calculations or even approximations” — of what the two-sided price of a transaction would be in the but-for world. (*Id.* at 21.) They further fault Plaintiffs’ experts for failing to offer any opinions on “but-for world prices of Amex, Discover, Star, NYCE, Pulse, or any other network’s transactions,” calling this omission a “significant misstep, particularly in light of Amex’s unilateral ability to maintain its *own* anti-steering provisions, post-*Amex*, in a but-for world.” (*Id.*) Defendants then characterize Plaintiffs’ experts’ opinions as focusing solely on the existence of supracompetitive prices based on the “low pass-through” theory purportedly rejected by the Second Circuit and Supreme Court in *Amex*. (*Id.* at 21–22.) In Defendants’ view, Plaintiffs’ experts rely on this admittedly insufficient theory, *see Amex* 138 S. Ct. at 2288; *Am. Express II*, 838 F.3d at 205, rather than “attempting to show what a competitive transaction price would be in the but-for world,” (Defs.’ *Amex* Mem. 21–22). Defendants also suggest that Plaintiffs fail to show that Defendants charged higher two-sided prices than their competitors, and that Plaintiffs instead “rely on issuing bank profitability analyses to suggest that net transaction prices are at supracompetitive levels. (*Id.* at 23.) Regardless of what Plaintiffs manage to show about the but-for world, however, Defendants continue to argue that predictions about the but-for world would be insufficient to qualify as direct evidence of anticompetitive effects. (Defs.’ Grubhub *Amex* Mem. 4–6; *see also supra* Section II.e.i.) Faulting Grubhub expert Dr. R. Craig Romaine for testifying that “opinions about [the but-for world] are . . . based on ‘economic analysis and logic to try to analyze what is likely to happen,’” Defendants argue that an unobservable world cannot be used to meet the Second Circuit’s standard for “actual market data.” (Defs.’ Grubhub *Amex* Mem. 6 (first quoting Defs.’ Grubhub R. 56.1 Stmt. ¶ 21;

Docket Entry No. 8928, and then quoting *Virgin Atl.*, 257 F.3d at 264).) Finally, Defendants rely on the argument that credit card rewards would decline in the but-for world. (Defs.’ *Amex* Mem. 34–35.) Specifically, they argue that Plaintiffs have failed to demonstrate that rewards would not decline in the but-for world, thereby keeping the net price the same as it is now, or possibly even higher. (*Id.*)

Direct Action Plaintiffs argue that they have established that the restraints caused the prices to be above a competitive level, and they do not need to precisely calculate the two-sided transaction prices. (DAP’s *Amex* Opp’n 15–18.) They argue that Professor Jerry Hausman and Dr. Robert Harris calculate the two-sided transaction prices across both sides of the transaction platforms and conclude that the two-sided transaction prices are supracompetitive. (*Id.* at 16.) Plaintiffs contend that they do not need to calculate precisely the two-sided transaction prices that would have prevailed in a competitive but-for world, and that if they establish that the restraints caused prices to be above a competitive level, Defendants are liable. (*Id.* at 19.) Direct Action Plaintiffs argue that “Defendants improperly attempt to import a damages issue (calculation of a but-for price), into the liability analysis.” (*Id.* at 19 n.19.) Further, even when calculating damages, an expert is required only to provide a “just and reasonable estimate” of antitrust damages because antitrust damages are difficult to calculate. (*Id.*) They argue that they can show that prices are supracompetitive by showing that Defendants retain the majority of fees charged to merchants, set prices without considering costs, and enjoy high profits. (*Id.* at 15–28.)

Plaintiffs also contend that, even in the but-for world of lower merchant prices, issuing banks would be incentivized to continue offering negative *transaction* prices to cardholders in an effort to compete for market share in the separate, but related, market for cardholder finance

charges. (ERCP's *Amex* Opp'n 35 ("[A]bsent the restraints[,] the defendants might well offer very low, or even negative, *total* prices on credit-card transactions as they compete to get access to the profits to be made on credit-card interest charges." (citing Stiglitz Rep. ¶¶ 92–94, 127)).) That is, a negative transaction price to cardholders could be a "loss leader" to lure customers in, allowing issuers to make other, more profitable sales to those customers (*i.e.*, finance charges) — just as supermarkets often price bananas and milk below cost to draw in shoppers who will go on to make other, more profitable purchases. *See Parish Oil Co. v. Dillon Cos.*, 523 F.3d 1244, 1254 (10th Cir. 2008) (rejecting state law unfair practices challenge and noting "loss leaders can have legitimate economic purposes and effects"); *Hiland Dairy, Inc. v. Kroger Co.*, 402 F.2d 968, 975 (8th Cir. 1968) (finding the "power to lower milk prices by using milk as a 'loss leader' and recouping by higher prices on other items" could not sustain an antitrust violation in the absence of monopolization in the grocery market); *see also Apple*, 791 F.3d at 331–32 (noting that Amazon engaged in loss-leader pricing on e-books, "losing money on some sales in order to encourage readers to adopt the Kindle," and remarking that below-cost pricing could only be unlawfully anticompetitive if there was a "dangerous probability" that Amazon could recoup its losses by raising prices after it drove its competitors out of the market).

The Court is unpersuaded, at least at the summary judgment stage, that Plaintiffs are required to calculate a but-for world two-sided price to satisfy their *prima facie* burden. First, *Amex* requires only that Plaintiffs prove that prices would have been lower or output would have been higher in the world without the Defendants' challenged conduct. *Amex* is not so stringent as to demand an exact number — either in terms of price or output. This conclusion is supported by the Supreme Court's inclusion of impaired quality as a basis to find an antitrust violation. *See*

Amex, 138 S. Ct. at 2284 (noting that “decreased quality in the relevant market” could constitute “[d]irect evidence of anticompetitive effects”).

Second, antitrust jurisprudence “expressly refuses to impose extraordinary burdens on a plaintiff to construct the but-for price.” *In re Elec. Books Antitrust Litig.*, No. 11-MD-2293, 2014 WL 1282293, at *16 (S.D.N.Y. Mar. 28, 2014). Where the but-for price is uncertain, “the plaintiff’s burden of proving damages is, to an extent, lightened,” because “the wrongdoer shall bear the risk of the uncertainty which his own wrong has created.” *New York v. Hendrickson Bros., Inc.*, 840 F.2d 1065, 1077–78 (2d Cir. 1988). The Supreme Court has long agreed that plaintiffs are not required to calculate damages with certainty. *J. Truett Payne Co., Inc. v. Chrysler Motor Corp.*, 451 U.S. 557, 565 (1981) (“[D]amages issues in [antitrust] cases are rarely susceptible of the kind of concrete, detailed proof of injury which is available in other contexts.”); *see also Comcast Corp. v. Behrend*, 569 U.S. 27, 35 (2013) (“Calculations need not be exact.”). If damages need not be calculated with certainty, then Plaintiffs are not obligated to calculate a but-for price with certainty to prevail on a motion for summary judgment.

The Court first discusses the expert opinions of Professors Dennis Carlton and Jerry Hausman, Drs. Robert Harris and Reto Kohler, and Professor Joseph Stiglitz, and then explains why this evidence satisfies Plaintiffs’ burden, on a motion for summary judgment, to offer a *prima facie* case of harm to competition under *Amex* through evidence of increased price.³¹

³¹ (See Carlton Rep.; Expert Reply Rep. of Dennis W. Carlton (“Carlton Reply Rep.”), annexed to the Decl. of Gary Carney as DDX2, Docket Entry No. 8544-1; Hausman Rep.; Expert Reply Rep. of Prof. Jerry Hausman (“Hausman Reply Rep.”), annexed to Szanyi Decl. as SJDX401, Docket Entry No. 8526-17; Harris Rep.; Harris Reply Rep.; Expert Rep. of Dr. Reto Kohler (“Kohler Rep.”), annexed to Szanyi Decl. as SJDX405, Docket Entry No. 8526-18; Stiglitz Rep.; Expert Reply Rep. of Joseph Stiglitz (“Stiglitz Reply Rep.”), annexed to Szanyi Decl. as SJDX416, Docket Entry No. 8526-19.)

1. Professor Dennis Carlton

Professor Dennis Carlton, expert for the Equitable Relief Plaintiffs, opines that two-sided transaction prices are supracompetitive for several reasons. First, he points to Visa’s “Grand Bargain” strategy as evidence of supracompetitive two-sided pricing. After the 2012 settlement in which the network rules were amended to permit merchants to surcharge in certain circumstances, several large merchants threatened to begin imposing surcharges on Visa cards. Visa’s Grand Bargain response was to [REDACTED] [REDACTED]. (See Carlton Rep. ¶¶ 75–79.) Prof. Carlton explains that the Grand Bargain resulted in lower prices to these merchants with no corresponding change (*i.e.*, decline) to cardholder rewards. (*Id.* ¶¶ 85, 91.) That is, the average two-sided price with respect to these merchants decreased as a result of the Grand Bargain. (*Id.*) Prof. Carlton offers two conclusions from this evidence: (i) elimination of one of the network restrictions (the No Surcharge Rule) resulted in a lower two-sided prices at these merchants; therefore, elimination of other network restrictions would further lower the two-sided price, (*see id.* ¶ 85); and (ii) that the Grand Bargain evidence “indicates that rewards to cardholders do not offset price increases to merchants and thus that the Network Restrictions elevate the net price of payment network services,” (*id.* ¶ 91). A third conclusion can be drawn from the Grand Bargain evidence. The fact that the two-sided price fell after the elimination of the Surcharge Rule is itself evidence that the two-sided price was supracompetitive — this is because if the two-sided price *was* competitive prior to the 2012 settlement, there would be no room for the price to fall. *See In re Aggrenox Antitrust Litig.*, 199 F. Supp. 3d 662, 667 (D. Conn. 2016) (“[P]rices in a competitive market will tend . . . toward marginal cost.”). A price cannot remain below the competitive price indefinitely, because it would imply that the firm’s economic profits were

below zero, leading to exit from the market. Christopher R. Leslie, *Predatory Pricing and Recoupment*, 113 Colum. L. Rev. 1695, 1719 n.133 (2013) (“[A] firm which prices its products below cost for an extended period of time may never be able to recoup its losses.” (quoting William H. Jordan, Comment, *Predatory Pricing After Brooke Group: The Problem of State ‘Sales Below Cost’ Statutes*, 44 Emory L.J. 267, 299 (1995))).

Second, Prof. Carlton points to empirical evidence from Australia as a comparative benchmark. In 2003, the Reserve Bank of Australia fixed interchange fees charged by Visa and Mastercard to 55 basis points (later reduced to 50 basis points). (Carlton Rep. ¶ 97 & n.130; Stiglitz Rep. ¶ 101.) Studies found that the lower price charged to merchants was not fully offset by a higher price (*i.e.*, lower rewards) charged to cardholders, “resulting in a lower ‘net price’ in Australia after the intervention.” (Carlton Rep. ¶¶ 99.) The lower two-sided price in Australia did not make it unprofitable for Visa or Mastercard to operate in Australia and the networks did not exit the market. (Stiglitz Rep. ¶ 101.) As Prof. Stiglitz explains, the inference to be drawn from this Australian analogy is that a two-sided price above that which prevails in Australia is supracompetitive. (*Id.*)

Third, Prof. Carlton reviewed the profitability of Visa and Mastercard and concluded that both are “highly profitable” and each earns “above a normal rate of return.” (Carlton Rep. ¶ 145.) Prof. Carlton notes that “the profits of both Visa and Mastercard indicate excess profits, profits above those needed to compensate all factors of production.” (*Id.*) Prof. Carlton concludes that the excess profits, combined with the lack of entry of a new competitor in nearly forty years, is “indicative of durable market power,” (*id.*) — that is, “the ability to raise prices above those that would be charged in a competitive market.” *NCAA v. Oklahoma*, 468 U.S. at 109 n.38.

Finally, Prof. Carlton makes an observation that belies Defendants' claims that the market is competitive. He starts with an unobjectionable premise that, in a competitive market, the two-sided price should equal the costs to both sides of providing the transaction.³² (Carlton Reply Rep. ¶ 51.) However, different tiers of cards incur different costs both for merchants and cardholders. For example, on Visa Signature Preferred Rewards cards, merchants pay ■ basis points in interchange and cardholders receive ■ basis points in rewards. (*Id.*) Using Prof. Murphy's formula, this means that the cost of providing this transaction ($C_M + C_C$) is ■ basis points. *Id.* For Visa credit cards with no rewards, merchants pay ■ basis points in interchange and cardholders receive ■ basis points in rewards. (*Id.*) Applying Prof. Murphy's formula, this means that the "cost" of providing this transaction is ■ basis points. (*Id.*) The cost of providing a transaction cannot simultaneously be ■ basis points and ■ basis points. What Prof. Carlton demonstrates is that at least one of these prices is supracompetitive. While it is possible that high rewards credit cards are being offered at a competitive net price, that would still mean that a two-sided price above ■ basis points on cards that offer no rewards to cardholders is supracompetitive.

Prof. Carlton, however, did not estimate two-sided prices for the but-for world without the network restrictions. (*See* Dep. of Dennis Carlton 72:11–24 (credit), annexed to Szanyi Decl. as SJDX378, Docket Entry No. 8526-6; *id.* at 87:22–88:15 (debit).)

³² Prof. Carlton also relies on Prof. Murphy's claim that "under competition . . . holds as an equality: $F_M + F_C = C_M + C_C$," where F_M is the merchant fee, F_C is the cardholder fee (often negative), C_M is the merchant-side cost of providing a transaction, and C_C is the cardholder-side cost of providing a transaction. (*See* Carlton Reply Rep. ¶ 51; Expert Rep. of Kevin M. Murphy ("Murphy Rep.") ¶ 171 (footnote omitted), annexed to the Decl. of James A. Wilson as Ex. 1, Docket Entry No. 8501-1; *see also id.* ¶¶ 169–70 (defining variables).)

2. Professor Jerry Hausman

Professor Jerry Hausman, expert for the 7-Eleven Plaintiffs and the Home Depot Plaintiffs, also opines that the two-sided price is supracompetitive.

First, Prof. Hausman calculates a two-sided price using actual market data. His two-sided price includes four elements: (i) an average merchant interchange fee of [REDACTED] basis points, (ii) an average cardholder reward of [REDACTED] basis points, (iii) an average cardholder “free float” benefit of [REDACTED] basis points, and (iv) an average per-transaction cardholder financing cost of [REDACTED] basis points. (Hausman Rep. ¶ 231.) He therefore calculates a net two-sided price of [REDACTED] basis points. (*Id.*) “Using these values,” Prof. Hausman “calculate[d] a dollar-weighted average pass-through rate of just 25%.” (*Id.* ¶ 232.)

Prof. Hausman opines that this two-sided price with a low average pass-through rate is “significant evidence” that the price is supracompetitive because, “[i]f the market were competitive, market forces would result in higher pass-through rates (whether by lowering fees to merchants or raising rewards or other benefits to cardholders).” (*Id.* ¶ 233; *see also* Hausman Reply Rep. ¶ 11 (“[D]uring the relevant period, the effective ‘pass-through’ rate was only approximately 25% — which is far less than the close to 100% pass-through rate for competitive payments platforms.”).) Prof. Hausman also contends that Defendants’ expert Professor Murphy agrees that in a competitive market pass-through approximates 100%. (*See* Hausman Reply Rep. ¶ 123 n.213. (“Professor Murphy states that ‘under competition . . . $F_M + F_C = C_M + C_C$.’ Rearranging terms, $F_C = C_M + C_C - F_M$, *i.e.*, the cardholder fee (F_C), which is negative because cardholders receive benefits, equals the merchant fee (F_M) except for two-sided transaction costs ($C_M + C_C$) which are minimal.” (citation omitted)).)

Second, Prof. Hausman asserts that Visa and Mastercard’s supracompetitive pricing is “further confirmed by the limited examples of merchant deals in the actual world that . . . reflect Visa and Mastercard competing for acceptance.” (Hausman Rep. ¶ 242.) For example, Visa reached an exclusive deal with [REDACTED] in which [REDACTED] only pays [REDACTED] basis points of interchange fees. (*Id.*) This evidence of a lower merchant price — alone — is the kind of one-sided evidence the Court rejected in *Amex*. When considered with the unstated implication that cardholder rewards are unchanged when shopping at [REDACTED], the evidence implies a lower two-sided price at [REDACTED]. This evidence, however, does not demonstrate that *all* merchants could pay interchange at the [REDACTED] rate with no corresponding increase in the cardholder price. In fact, other evidence in Prof. Hausman’s report controverts this inference. [REDACTED]

[REDACTED] (*Id.* ¶ 370.) [REDACTED]

[REDACTED] The [REDACTED] example, therefore, does not assist Plaintiffs in meeting their prima facie burden. *See United States v. Apple Inc.*, 952 F. Supp. 2d 638, 696 (S.D.N.Y. 2013) (“[I]f [a] claim is one that simply makes no economic sense — respondents must come forward with [other,] more persuasive evidence.” (quoting *Matsushita*, 475 U.S. at 587)), *aff’d*, 791 F.3d 290 (2d Cir. 2015).

Using data on issuers’ costs from the Federal Reserve’s cost study, Prof. Hausman calculates a competitive benchmark rate of 72 basis points on the average credit transaction value of \$87. (*Id.* ¶ 635.) He contends this conclusion is bolstered by Visa’s finding that issuer costs would be “more than covered” by an interchange rate of [REDACTED] basis points. (*Id.* ¶ 637.) In a

competitive market, prices approach marginal costs.³³ Accordingly, Prof. Hausman's data suggest that the two-sided price should be closer to 72 basis points than 142 basis points. (*See id.* ¶¶ 232–33.) Prof. Hausman also reviewed issuers' costs and concluded that, excluding interest payments but including annual fees, even for "pure transactors" it would "still be profitable to keep rewards at the level they are now" at the competitive benchmark he estimated. (Dep. of Jerry Hausman ("Hausman Dep.") 240:17–241:24, annexed to Szanyi Decl. as SJDX380, Docket Entry No. 8526-8.)

In addition, Prof. Hausman concludes that Visa's and Mastercard's profits are supracompetitive. For example, Prof. Hausman cites Visa's CEO "who says Visa[s] and Mastercard's margins are three times AmEx." (Hausman Dep. 260:13–20.) Prof. Hausman also found that Visa's and Mastercard's profit margins are higher than those of other networks. (*Id.* 261:7–12.)

3. Dr. Robert Harris

Dr. Robert G. Harris, an expert in the economics of competition and innovation, was asked by the Target Plaintiffs to provide his opinion on whether any of the challenged rules were anticompetitive. (Harris Rep. ¶ 9.) He defined the "Competitive Restraints" as "consist[ing] principally of the Honor All Cards rules, No Discount rules, No Surcharge rules, Anti-Discrimination rules, No Competing Marks rules, Visa's No Bypass rules, and Visa's All Outlets policy." (*Id.*) Specifically, he was asked to "consider the interchange fees and network fees that the Target Plaintiffs would have paid if the Competitive Restraints did not exist." (*Id.*)

³³ *See In re Aggrenox Antitrust Litig.*, 199 F. Supp. 3d 662, 667 (D. Conn. 2016) ("[P]rices in a competitive market will tend . . . toward marginal cost.").

Dr. Harris first argues that the competitive restraints at issue are fundamentally different from those at issue in *Amex*, (*id.* ¶¶ 918–44), but he nevertheless calculated a “single price” for credit card transactions consistent with the reasoning in *Amex*, (*id.* ¶ 920). He defines the price in two ways, first “narrowly as the merchant discount fee (the total price to the merchant), net of any economic effects on the cardholder directly resulting from making a transaction.” (*Id.*) He specifies that, unlike the three-party model in *Amex*, the four-party model here allows for fees charged by acquirers/processors to be “determined in a generally competitive fashion.” (*Id.*) He therefore excludes these fees from any definition of the “single price.” The second, broader definition of the “single price” he offers is “the total merchant discount fee paid by the merchant, . . . plus all fees charged by Visa or Mastercard and their issuing banks to the cardholder (*e.g.*, gross interest charges, annual fees, late payment fees and other fees), minus any rewards paid out to cardholders.” (*Id.* ¶ 921.) He explains that the difference in the two measures “is that the latter accounts for the economic effects on the cardholder that do not directly result from making a transaction.” (*Id.*)

Even adopting the more conservative narrow definition (which also aligns more closely with the discussion of the single price in *Amex*), Dr. Harris opined that “[t]he total price of Visa and Mastercard transactions . . . exceeds the competitive price.” (*Id.* ¶ 928.) In support, he first points to merchant co-brand agreements with card issuers, where issuers compete for agreements with “merchants with . . . valuable enough brand[s] to enhance card issuance.” (*Id.*) As Dr. Harris explains, even “[i]n these relatively infrequent situations of limited competition, the price to the merchant is significantly lower . . . and often negative — that is, the merchant is paid for accepting the co-brand transactions[, y]et, there is no increase in price to the cardholder

sufficient in magnitude to offset the lower price to the merchant,” leading to a lower single price. (*Id.* (footnote omitted).)

Second, he cites another Plaintiffs’ expert, Dr. Reto Kohler (discussed below),³⁴ to claim that the “economic profit rate” in the credit card business is “above zero,” meaning that “banks are making profits in excess of the profits needed to earn a normal competitive rate of return.” (*Id.* ¶ 929.) He opines that this, too, suggests that “under the narrow definition of the ‘single price,’ cartel prices are well above the competitive level.” (*Id.*)

Dr. Harris similarly states that the narrow single price for debit card transactions is well above a competitive price because “banks are making profits in excess of the profits needed to earn a normal competitive rate of return on debit accounts.” (*Id.* ¶¶ 930–33; *see also id.* ¶ 932–33 (laying out the merchant and cardholder prices for various categories of debit transactions, all of which show that “the net benefit to cardholders is only [REDACTED] to [REDACTED] of the price to the merchant”).)

Separately, Dr. Harris also pointed to evidence that Discover previously maintained a

[REDACTED]

[REDACTED] (*Id.* ¶ 1092.) As told by a Discover executive, [REDACTED]

[REDACTED]

[REDACTED] (*Id.*

³⁴ Although Dr. Harris cites to the expert report of Maria Blanco, “Dr. Kohler’s expert report was submitted as a substitute for the expert report of Maria Blanco.” *In re Interchange Fee Antitrust Litig.*, 2022 WL 15053250, at *6 (citation omitted). “Ms. Blanco submitted an initial report on October 5, 2018 and a revised report on March 26, 2019, but was unable to continue as an expert witness after leaving Marakon and joining PricewaterhouseCoopers. Dr. Kohler, who had ‘worked closely with Ms. Blanco on all aspects of her report,’ was asked to serve as the expert witness after Ms. Blanco left the case. He submitted an expert report (Kohler Rep.) on May 22, 2019.” *Id.* (citations omitted).

(citation omitted).) As another example, he offers [REDACTED]

[REDACTED] (*Id.* ¶ 1093.)

Dr. Harris offers three alternative benchmarks for interchange fees that might be observed in the but-for world: Competitive, Moderate, and Ceiling benchmarks. The “Competitive benchmark” assumes interchange fees “achievable by the aggressive pursuit of competitive pricing initiatives . . . in the absence of the Competitive Restraints.” (*Id.* ¶ 84.) The “Moderate benchmark . . . reflects enhanced competition and the absence of anticompetitive rules.” (*Id.*) Finally, the “Ceiling benchmark” — which Dr. Harris describes as “a *very* conservative benchmark” — “indicates . . . an upper limit on what interchange fees would have been in the but-for world.” (*Id.* ¶¶ 84, 86.) Whether under the Competitive benchmark of [REDACTED] to [REDACTED] basis points, the Moderate benchmark of [REDACTED] to [REDACTED] basis points, or the Ceiling benchmark of [REDACTED] basis points, Dr. Harris concludes that the “issuers would remain profitable, with their return on equity exceeding the cost of equity, even with the lower interchange revenue.” (*Id.* ¶¶ 1197, 1201–03.)

4. Dr. Reto Kohler

Dr. Reto Kohler, expert for the Target Plaintiffs, the 7-Eleven Plaintiffs, and The Home Depot, was asked “to provide an opinion regarding the profitability of credit and debit card accounts for banks historically and under scenarios of reduced interchange rates.” (Kohler Rep. ¶ 6.) Dr. Kohler conducted an empirical analysis of issuing banks’ profitability and expenses, and concluded that issuing banks would be able to profitably maintain current levels of credit card rewards at lower levels of interchange. (*Id.* ¶¶ 105–08.)

Dr. Kohler reviewed Visa and Mastercard issuing banks' financial data and calculated a weighted average return on equity ("ROE") of [REDACTED], far in excess of the weighted average cost of equity ("COE") of [REDACTED]. (*Id.* ¶ 16.) He found, therefore, that issuing banks earn, on average, economic profits of [REDACTED].³⁵ (*Id.*) Dr. Kohler explains that returns on equity greater than the costs of equity are "additional returns over market expectations" which tend to "increase the market value of bank (*i.e.*, [its] share price will rise)." (*Id.* ¶ 37.) In other words, "where a bank's ROE is greater than its COE, it is generating profits above what investors would normally expect." (*Id.*) Dr. Kohler also found that gross interest income "constituted a weighted average of [REDACTED] of total Visa- and Mastercard-issuer credit card account revenues" between 2004 and 2016, (*id.* ¶ 41), and that rewards expenses constituted approximately [REDACTED] of issuers' total credit card expenses during this period, (*id.* at 26 fig.3).

Dr. Kohler concluded that issuing banks would be able to profitably maintain current levels of credit card rewards at lower levels of interchange for several reasons. First, Dr. Kohler demonstrates that "rewards expense[s] do[] not take up a majority of interchange fee revenue." (*Id.* ¶ 102.) "In 2016, the transaction-linked rewards rate was [REDACTED] [basis points], while the interchange rate was [REDACTED] [basis points]. Thus, net interchange was [REDACTED] [basis points]." (*Id.*) Rewards expenses, therefore, amounted to less than half of interchange revenues. He noted, further, that "issuers [also] have other streams of income, such as interest income and fees, from which they are free to fund rewards. Issuers could also shift some of their marketing spending over to funding credit card rewards." (*Id.*)

³⁵ Dr. Kohler explains that economic profit or "EP spread" is ROE minus COE, but does not explain why he calculates this to be [REDACTED] rather than [REDACTED]. (*See* Kohler Rep. ¶ 16.)

Second, Dr. Kohler assessed issuing banks' profitability at the three benchmark levels of interchange fees calculated by Dr. Harris. Using the weighted average interchange fee of Dr. Harris' competitive benchmark — [REDACTED] basis points — and holding rewards constant, Dr. Kohler calculated that issuing banks would have had a weighted average ROE of [REDACTED], only slightly in excess of their average COE of [REDACTED]. (Kohler Rep. ¶ 105.) This finding is significant for two reasons. First, it corroborates that Dr. Harris' competitive benchmark is truly "competitive" because, in perfect competition, economic profits are zero.³⁶ Second, Dr. Harris' competitive benchmark implies a negative two-sided total price. With merchant interchange of [REDACTED] basis points and cardholder rewards of [REDACTED] basis points, the total two-sided price is minus [REDACTED] basis points. Combined with Dr. Kohler's analysis, this result means that issuing banks could use other sources of revenues (*e.g.*, interest earned on revolving accounts) to profitably *pay* merchants and cardholders to make transactions. (*Id.*)

Using the weighted average interchange fee of Dr. Harris' moderate benchmark — [REDACTED] basis points — Dr. Kohler concluded that issuing banks would earn a weighted average ROE of [REDACTED] or economic profits of [REDACTED]. (*Id.*) Finally, using Dr. Harris' ceiling benchmark of [REDACTED] basis points, Dr. Kohler calculated that issuing banks would earn a weighted average ROE of [REDACTED], or economic profits of [REDACTED]. (*Id.*) Dr. Harris' "ceiling" benchmark is also notable because it is the point at which pass-through is [REDACTED]% (*i.e.*, merchants pay [REDACTED] basis points of interchange and cardholders earn [REDACTED] basis points of rewards). As Prof. Hausman and Dr.

³⁶ In a perfectly competitive market, it is assumed that entry into the market is costless. Economic profits are defined to be profits earned in excess of a normal rate of return (*i.e.*, the cost of equity). Thus, if a firm is earning economic profits, new firms would enter the market to earn some of the excess profits, thereby eventually dissipating economic profits to zero. Here, economic profits of 0.1% are not meaningfully distinguishable from zero.

Murphy appear to agree, in a competitive market, pass-through approaches 100%, and Dr. Kohler's empirical analysis confirms that issuing banks could do so profitably. (*Id.*; *see also* Hausman Reply Rep. ¶ 123 n.213 (citing Murphy Rep. ¶ 171)).

Dr. Kohler corroborated his own analysis by calculating the average lifetime value ("LTV") of a credit card account and assessing what would happen to the profitability of account LTV at various levels of interchange. (Kohler Rep. ¶ 107.) Dr. Kohler concluded that, at an average interchange fee of ■ basis points and holding rewards constant, "the LTV of the cardholder can still [break even] on an [economic profit] basis." (*Id.* ¶ 108.) That is, even with a negative total transaction price of minus ■ basis points, issuing banks would break even on the average cardholder.

Dr. Kohler conducted a similar analysis of demand deposit accounts ("DDAs," often referred to as "checking accounts") and concluded that DDAs, too, would be profitable at lower levels of interchange. (Kohler Rep. ¶¶ 117–39.) Dr. Kohler concluded that DDAs would be profitable with zero or even negative interchange. (*Id.* ¶ 139.) Applying Dr. Harris' competitive, moderate, and ceiling benchmarks had little effect on the profitability of DDAs, and they would be profitable at all of Dr. Harris' benchmarks. (*Id.* ¶¶ 141–42).

5. Professor Joseph Stiglitz

Professor Joseph Stiglitz, expert for the Equitable Relief Plaintiffs, offers a number of competitive benchmarks intended to show that Visa's and Mastercard's two-sided prices are supracompetitive. First, Prof. Stiglitz points to the so-called "private label" credit cards offered by Synchrony Bank:

On the cardholder side, the Synchrony programs are much like Visa and Mastercard, including offering rewards for card use. However, on the merchant side, Synchrony typically charges no fee to merchant but rather pays "royalties" and shares the cardholder-side

profits, effectively resulting in a negative merchant fee. This indicates a total price that is significantly lower than that of Visa/Mastercard for a comparable product.

(Stiglitz Rep. ¶ 90.) Prof. Stiglitz opines that QVC and Tractor Supply Company are similar examples in which cardholders receive rewards and in which merchants pay no fees, resulting in lower two-sided prices than for Visa or Mastercard transactions. (*Id.* ¶ 91.) Prof. Stiglitz concludes that, if anything, Visa's and Mastercard's two-sided prices should be lower than these examples because the "costs of moving electrons are negligible" and Visa and Mastercard should benefit from economies of scale. (*Id.*)

Prof. Stiglitz also opines that "Discover's pricing . . . shows the supracompetitive total prices of Visa and Mastercard." (*Id.* ¶ 95.) Prof. Stiglitz notes that, in the early 1990s, Discover's two-sided price "was significantly below that of Visa and Mastercard," because it charged merchants fees below that of Visa or Mastercard, charged cardholders no annual fee, and gave cardholders 1% cash back. (*Id.*) At the time, "Visa and Mastercard generally charged an annual fee, and offered few 'rewards.'" (*Id.*)

Prof. Stiglitz points to the debit card market as an example of a competitive benchmark for the *cost* of providing credit card transactions and as "evidence of the supracompetitive total prices charged by Visa and Mastercard for credit card services." (*Id.* ¶ 100.) Because cardholders generate positive profits through interest charged on revolving balances, "there should be a lower competitive price for credit card usage than for debit card usage." (*Id.*) However, he states that "nearly all merchants pay substantially higher fees for credit card use than for debit card use." (*Id.*) From this evidence, Prof. Stiglitz "conclude[s] that the total price of Visa and Mastercard credit card transactions is supracompetitive." (*Id.*)

Finally, Prof. Stiglitz cites evidence from Australia as yet another competitive benchmark indicating supracompetitive prices in the United States. (*Id.* ¶ 101.) After government

regulations capped interchange at 50 basis points, “[t]he result was a significant reduction in the total price of Visa and Mastercard transactions.” (*Id.*) Prof. Stiglitz observes that Visa and Mastercard “remain viable and profitable” in Australia “with a total price lower than those of Visa and Mastercard in the United States.” (*Id.*) If anything, he notes, “the presence of returns to scale suggests that Australia would have a higher total price than the [United States], not a lower one.” (*Id.*)

6. Plaintiffs’ experts have offered sufficient evidence of supracompetitive prices

In sum, Plaintiffs have offered the following empirical evidence from which a jury could reasonably conclude that the total two-sided prices of credit and debit transactions are supracompetitive: (i) empirical evidence of historical, observed two-sided prices combined with empirical evidence of costs, together showing that prices are substantially above costs; (ii) evidence of historical, observed two-sided prices combined with empirical evidence of networks’ and issuing banks’ profitability, together tending to show that supracompetitive prices contributed to supracompetitive profitability; and (iii) empirical evidence of real-world benchmarks profitably operating with lower two-sided prices.

The Court declines to categorize the evidence as direct or indirect, given that the indirect evidence could satisfy Plaintiffs’ burden provided that Plaintiffs are also able to prove that Defendants possess market power. *See US Airways*, 2022 WL 1125956, at *9 (explaining that the distinction between direct and indirect evidence is unimportant where there is sufficient evidence to conclude the defendant has market power). In short, Plaintiffs have satisfied their burden by demonstrating direct evidence that Defendants controlled prices or excluded competition. In addition, Plaintiffs have offered sufficient indirect evidence, assuming Defendants possess market power, to satisfy their prima facie burden at this stage.

In *US Airways*, the Second Circuit found evidence of supracompetitive prices where there was empirical evidence that Sabre's profits were much higher than those of comparable companies and that Sabre was charging three times as much as it would have in a competitive market, based on a comparison of actual fees Sabre charged US Airways and fees Sabre would have to charge in order to earn a reasonable profit (a reasonable booking fee). 938 F.3d at 61. Plaintiffs have offered similar evidence. Plaintiffs have offered evidence both that profits are higher than one would expect to find in a competitive market, (*see, e.g.*, Carlton Rep. ¶ 145 (“[T]he profits of both Visa and Mastercard indicate excess profits, profits above those needed to compensate all factors of production.”)), and higher than those of comparable companies, (*see, e.g.*, Hausman Dep. 260:13–20 (“Visa[s] and Mastercard’s margins are three times AmEx.”); *id.* at 261:7–12 (discussing other comparable networks)). In addition, Plaintiffs have offered evidence that Defendants are charging a net, two-sided price several times higher than would be necessary to earn a reasonable profit. (*See, e.g.*, Kohler Rep. ¶ 105 (“[E]ven at an interchange rate that is 20% of the actual weighted average interchange rate . . . credit card issuing would still be profitable.”).) Given what the Second Circuit in *US Airways* characterized as a “mountain of evidence,” 938 F.3d at 63, the Court cannot conclude, on this evidence, that Plaintiffs have failed to meet their burden in raising a triable question of fact as to whether prices are higher than one would expect to find in a competitive market.

ii. Output

Defendants assert that Plaintiffs cannot demonstrate that the challenged restraints reduced the number of credit- or debit-card transactions. (Defs.’ *Amex* Mem. 3.) Rather, Defendants assert that output in the credit and debit transactions markets has increased over time, and argue that Plaintiffs have conceded that output has increased. (*Id.*) Defendants also claim that, under

Amex, Plaintiffs cannot make a showing of decreased output because the *Amex* Court found that “output of credit-card transactions grew dramatically” during the relevant period. (*Id.* (quoting *Amex*, 138 S. Ct. at 2288).) In support, Defendants claim that “[t]he undisputed facts show that output of credit and debit transactions has grown tremendously over the past few decades.” (*Id.* at 31 (citing Defs.’ 56.1 ¶¶ 125–43); *see also id.* at 31–32 (discussing purported concessions of Plaintiffs’ experts).) Defendants argue that Dr. Harris, Prof. Stiglitz, and Prof. Carlton concede that transaction output has increased, and that Prof. Hausman testified that demand was rising in both markets during the relevant period and that where demand is increasing, both output and price can increase. (Defs.’ *Amex* Mem. 31–32.) Defendants also argue that Plaintiffs have failed to demonstrate that, in the but-for world, merchant fees would in fact decrease, and that those reduced fees would result in lower retail prices, which would in turn lead to increased numbers of credit and debit transactions. (Defs.’ *Amex* Mem. 32–35; Defs.’ *Amex* Reply 24–25.) Defendants also contend that Plaintiffs’ experts’ opinions on output are insufficient because the experts failed to consider whether cardholder rewards would remain at real-world values even if interchange fees were reduced. (Defs.’ *Amex* Mem. 34–35.) That is, Defendants claim lower merchant-side fees could cause cardholder rewards to decline, making card usage less attractive and thereby leading to fewer credit and debit transactions. (*Id.*)

Direct Action Plaintiffs argue that they are not asking the jury to look outside the relevant market because higher fees result in higher retail prices for all customers and therefore reduce the number of payment-card transactions. (DAP’s *Amex* Opp’n 28–31.) They argue that although Prof. Hausman and Dr. Harris acknowledged that actual output increased, they testified that output in the but-for world could have exceeded the observed levels of growth because lower retail prices could have led to an increase in transactions. (*Id.* at 34–36.)

As a threshold matter, the Court notes that Plaintiffs’ experts have suggested that, in a cartel situation, output may be artificially inflated above the socially optimal level (*i.e.*, output is above the welfare maximizing level). *See, e.g.*, Hausman Rep. ¶¶ 422, 425–26. Ultimately, consumer welfare has been the backbone of antitrust policy for over forty years. Indeed, “Congress designed the Sherman Act as a ‘consumer welfare prescription.’” *NCAA v. Oklahoma*, 468 U.S. at 107 (quoting *Reiter v. Sonotone Corp.*, 442 U.S. 330, 343 (1979)); *Brooke Grp.*, 509 U.S. at 221 (“[A]ntitrust laws’ traditional concern [is] for consumer welfare and price competition.”). Thus, on the one hand, *Amex* suggests that the relevant inquiry is whether output is lower than it would otherwise be, while on the other hand, “[a]lways, ‘[t]he goal is to distinguish between restraints . . . harmful to the consumer and [those] that are in the consumer’s best interest.’” *Alston*, 141 S. Ct. at 2151 (emphasis added) (quoting *Amex*, 138 S. Ct. at 2284).

According to Prof. Hausman, “in an industry with two-sided characteristics, an output increase is not necessarily a procompetitive outcome.” (Hausman Rep. ¶ 422.) He explains that this is so “because prices paid by one side of the market (*e.g.*, merchants) may be used to subsidize usage by the other side of the market (*e.g.*, credit card users). While that may stimulate more usage of credit cards, the increase in output is not a procompetitive outcome standing alone.” (*Id.*) To illustrate, Prof. Hausman gives the example of a milk cartel that is able to increase both the price and output of milk above socially optimal (*i.e.*, efficient) levels. (*Id.* ¶¶ 425–26.) The cartel achieves this suboptimal outcome by raising prices for a less price-sensitive group of customers (schools), and using the added profits to charge lower prices to more price-sensitive customers (the general public), thereby raising output inefficiently. (*Id.*) In sum:

Th[e] example demonstrates that an increase in quantity does not necessarily reflect an increase in competition, or that the increase in quantity advances consumer welfare. Indeed, in this example the opposite effect occurs. Perfect competition has been replaced by coordination among previous competitors. Yet quantity in the market has increased. But this increase in quantity does not imply consumers are better off. Under either a consumer welfare standard or social welfare (economic efficiency) standard, formation of the cartel has led to a decrease in welfare. The distortion in prices created by the cross subsidy breaks the link between changes in quantity and changes in welfare.

(*Id.* ¶ 427.)

Accordingly, increased output for the sake of output is not necessarily a procompetitive outcome. The Court is mindful that the milk cartel example involved price and output rising in tandem (which, as the Supreme Court noted in *Amex* is equally consistent with increasing demand).³⁷ See *Amex*, 138 S. Ct. at 2288 (citing *Brooke Grp.*, 509 U.S. at 237). A more unambiguously social-welfare-enhancing outcome is output rising as prices fall, because it is a “well known fact that the demand curve for goods and services slopes downward.” *Aini v. Sun Taiyang Co.*, No. 96-CV-7763, 1997 WL 576027, at *4 n.10 (S.D.N.Y. Sept. 15, 1997). Plaintiffs’ experts have offered credible evidence that output has increased in the limited examples where prices have fallen, which is consistent with Plaintiffs’ overall claim that output would increase and social welfare would be enhanced in the absence of the network restrictions.

Consistent with Prof. Hausman’s example, Dr. Harris demonstrates how the number of credit and debit transactions may be artificially inflated due to “cross-subsidization” by those who use payment methods that are cheaper for merchants to accept (*e.g.*, cash). (Harris Rep. ¶¶ 946–47.) He explains that the “Competitive Restraints restrict merchants’ ability to reflect differences in payment costs in the price they charge to the consumer . . . [because] the price to

³⁷ Prof. Hausman’s milk cartel example is available in full at Hausman Rep. ¶¶ 425–26.

consumers is the same regardless of whether they choose to pay in cash, with a check, or with a credit or debit card.” (*Id.* ¶ 946.) As a result, “all of [the merchant’s] customers end up paying for the cost of accepting credit and debit cards, even those customers who pay with a different payment type.” (*Id.*) This creates a “tax” on customers using cash and checks, and much like the schools in Prof. Hausman’s milk cartel example, these customers pay a “cross-subsidy” on credit and debit usage that drives up total output. (*Id.*) Dr. Harris describes this “market distortion” as causing an increase in output that “is not of the procompetitive variety.” (*Id.*)

Prof. Hausman offers two reasons why, in his view, the network restrictions have reduced output in ways that have harmed social welfare. First, “supracompetitive interchange has decreased overall consumption (including by credit card users) due to higher retail prices.” (Hausman Rep. ¶ 429.) Second, “supracompetitive interchange has reduced acceptance, thereby decreasing output. Lower interchange stimulates increased acceptance which increases marketwide output.” (*Id.*) Although the Court discusses each in turn, the Court finds the second reason to be more compelling and to be supported by empirical evidence.

Prof. Hausman’s first reason, although challenged by the Defendants as “[e]conomic gymnastics,” has theoretical support. (Defs.’ Grubhub *Amex* Mem. 10.) If, as the evidence suggests, merchants pass through supracompetitive interchange fees to consumers in the form of higher retail prices, (*see* Hausman Rep. ¶¶ 372–76; Hausman Reply Rep. ¶ 233; Harris Rep. ¶ 951), lower interchange fees would imply lower retail prices, (*see* Hausman Rep. ¶ 62; Harris Rep. ¶ 951). With more spending power, consumers would — in the aggregate — make more retail purchases, and some of those purchases would be with credit or debit cards. (*See* DAP’s *Amex* Opp’n 36.) Plaintiffs fail to offer direct evidence in support of this theory, but the Court accepts the theoretical argument for purposes of showing indirect competitive harm in

conjunction with market power.

Prof. Hausman's second reason is supported by empirical evidence and Defendants' experts appear to acknowledge its credibility.³⁸ For example, "[a] 2014 Visa analysis of its merchant strategy [REDACTED]

[REDACTED] (Hausman Rep. ¶ 429.) Both Visa and Mastercard followed through with this strategy by "reduc[ing] interchange to induce acceptance" for numerous merchants and segments. (Hausman Reply Rep. ¶ 259; *see also* Stiglitz Rep. ¶¶ 108 & n.180, 109; Stiglitz Reply Rep. ¶ 3; Expert Rep. of Dr. R. Craig Romaine ("Romaine Rep.") ¶ 910, annexed to the Decl. of Jayme Jonat as SJDX1320, Docket Entry No. 8927-28; *id.* ¶ 1105 ("Visa and Mastercard historically have relied on lower interchange fee rates to penetrate new merchant categories.").)

As Drs. Harris and Romaine note in support of this claim, "Visa and Mastercard executives have claimed that regulations in Europe mandating lower interchange fees have led . . . to broader merchant acceptance of credit cards in Europe." (Romaine Rep. ¶ 910; *see also* Harris Rep. ¶ 950.) Visa's CEO Charlie Scharf is quoted as saying that a low interchange environment is a "positive" for merchant acceptance. (Romaine Rep. ¶ 911; *see also* Harris Rep. ¶ 950.) Mastercard CEO Ajaypal Banga remarked that lower interchange "probably facilitated" broader merchant acceptance in Europe among merchants "who earlier were reluctant to accept

³⁸ (See Expert Rep. of Prof. Kenneth Elzinga ("Elzinga Rep.") 231, annexed to Szanyi Decl. as SJDX388, Docket Entry No. 8526-12; Expert Rep. of Prof. Justin McCrary ("McCrary Rep.") ¶ 94, annexed to Szanyi Decl. as SJDX412, Docket Entry No. 8526-19.)

electronic payments,” which is “a good thing.” (Romaine Rep. ¶ 911; *see also* Harris Rep. ¶ 950.)

Like Drs. Harris and Romaine, Prof. Stiglitz claims that the challenged restraints reduced output in the transactions market. In support, Prof. Stiglitz points to the fact that certain merchants refused to accept credit cards due to high merchant fees. (Stiglitz Rep. ¶¶ 108–09.) He also contends that in the but-for world, cardholders would have to internalize the cost of using rewards cards (*i.e.*, through surcharging), and would switch to alternative payment means, increasing the number of debit-card transactions. (*Id.* ¶ 113.)

Grubhub Plaintiffs present evidence that internal Mastercard documents suggest that transaction output would increase if interchange fees were lowered. (Grubhub *Amex* Opp’n 17 (“[L]ower transaction fees will drive increases in ‘small ticket’ transactions.”).) Plaintiffs also present evidence that Defendants had to offer lower prices to fast food (“quick-serve”) restaurants (with no corresponding change in cardholder benefits) to incentivize them to accept Visa and Mastercard, and that transaction output increased as a result. (*Id.* at 20.) According to Defendants’ expert, Professor Kenneth Elzinga, “Mastercard ha[s], in recent years, attracted new groups of merchants, such as supermarkets, gas stations, utility providers, and fast food . . . restaurants by establishing programs that provide favorable interchange rates on their transactions.” (Elzinga Rep. 231.) Similarly, Defendants’ expert Professor Justin McCrary stated in his report, “If the interchange rates for quick-serve restaurants were set at the travel segment level or even at the average level, it seems likely that fewer quick-serve restaurants would accept Mastercard[,] as illustrated by the 2004 experience when acceptance jumped significantly after lower quick-service rates were introduced.” (McCrary Rep. ¶ 94.) Dr. Harris points to similar examples, described in Elzinga’s report, of “Visa offer[ing] lower interchange

rates to various merchant segments in order to boost card usage,” including “(a) Pay TV, [Internet service providers], and Telecom companies, (b) public utilities, (c) charities, and (d) insurance.” (Harris Reply Rep. ¶ 608.) Dr. Harris highlights that when “Visa lowered its interchange fee for charitable contributions from . . . 1.94 percent in 2003, to 1.35 percent plus 5 cents in 2011, . . . ‘Visa’s share of payments for charitable giving grew from less than 1% to almost 10% during the period 2000–2017.’” (*Id.* (quoting Elzinga Rep. 106).) Plaintiffs’ contention that a market-wide decrease in the merchant-side price (assuming the cardholder-side price remains constant) could increase total transaction output is therefore supported by economic theory and empirical evidence.

Defendants’ primary objection to this evidence, as discussed above, is that it fails to account for the possibility that cardholder rewards could decline in the but-for world if interchange rates were lower. (Defs.’ *Amex* Mem. 32–35.) That is, if rewards declined, Defendants contend that fewer cardholders would use their credit cards over other forms of payment and that transaction volume would decrease correspondingly. In sum, Defendants’ argument is that assessing output if interchange decreases is, in essence, a one-sided analysis and should be rejected as a matter of law under *Amex*. (*Id.* at 34–35.)

The Court is unpersuaded. First, Plaintiffs offer direct, empirical evidence to support their contention that rewards would not decline in the but-for world — through evidence of issuing banks’ profitability, (*see* Kohler Rep. ¶¶ 105–08), and through evidence showing that rewards could be held constant even at significantly lower levels of interchange, (*see* Hausman Dep. 240:17–241:16). Second, decisions about interchange and rewards are bifurcated between networks and issuing banks. (Stiglitz Rep. ¶ 75 & n.120.) It was Visa and Mastercard that made the decision to reduce interchange to, for example, quick-service restaurants in order to induce

their acceptance of credit cards. (*Id.* ¶ 109.) Issuing banks, meanwhile, have no say over interchange, but they do set rewards. (*Id.* ¶ 75 & n.120; *see also* Kohler Rep. ¶¶ 93, 103.) Thus, there is no guarantee that reduced interchange set by the network would necessarily result in lower rewards set by the issuing bank. (*See* Kohler Rep. ¶ 104.) Third, Plaintiffs offer compelling evidence that the cardholder side of the market is relatively competitive because credit issuing is highly profitable and not constrained by the Network rules; that is, issuing banks compete for shares of the profits to be earned from issuing credit cards and therefore are incentivized to offer attractive sign-up bonuses and rewards to prospective cardholders. (*See* Hausman Rep. ¶ 342; Kohler Rep. ¶ 103.)

In sum, the Court finds that Plaintiffs have offered sufficient evidence to raise a triable question of fact as to whether the challenged restraints reduced output in the markets for credit- and debit-card transactions. Consistent with *Amex*, the evidence can be viewed as addressing both the merchant and cardholder sides of the network, especially when viewed in conjunction with the empirical evidence supporting Plaintiffs’ contention that rewards would be unchanged in the but-for world. In addition, Defendants’ arguments that output has increased over time and that the Supreme Court found in *Amex* that output had increased over time are without merit. *See Amex*, 138 S. Ct. at 2288–89; (*see also supra* Section II.e.i). Output increasing over time does not address whether output would have increased at a greater rate in the absence of the network restraints. Similarly, the Supreme Court’s factual finding in *Amex* has no bearing on the record before the Court. There is more than enough evidence in support of Plaintiffs’ case that jurors would not be compelled to return a verdict in favor of Defendants. *Smalls v. Collins*, 10 F.4th 117, 131 (2d Cir. 2021) (requiring that “a reasonable juror would have been compelled to accept the view of the moving party”).

iii. “Otherwise stifled competition”

Defendants contend that Plaintiffs cannot demonstrate that the challenged rules have “otherwise stifled competition” in the credit- and debit-card markets. (Defs.’ *Amex* Mem. 3–4, 35–38.) Defendants claim that the “undisputed record” confirms there is strong inter-network competition and argue that Plaintiffs’ experts have failed to adduce evidence that competition between networks would have been greater in the absence of the challenged rules. (*Id.* at 3–4, 35.) Defendants argue that the evidence shows — and that the Supreme Court in *Amex* recognized — that the payments market has been characterized by continuous innovation and that Plaintiffs, in attempting to argue that certain innovations could have been better or come about more quickly, have not shown otherwise. (*Id.* at 35–37.) In addition, Defendants argue that in *Amex*, the Supreme Court found that competition among credit card companies was thriving, pointing to competitive innovations in the market. (Defs.’ *Amex* Mem. 36–38.) Defendants also argue that the evidence showed the same for the debit-card market, until implementation of the Durbin Amendment. (*Id.* at 36.)

Direct Action Plaintiffs argue that the Court’s findings in *Amex* that Amex’s vertical restraints did not stifle competition do not equally apply to Visa’s and Mastercard’s horizontal restraints. (DAP’s *Amex* Opp’n 37–38.) Direct Action Plaintiffs explain that, unlike American Express’ rules, Visa’s and Mastercard’s rules apply to nearly every bank in America and prevent those banks from competing with each other, allowing them to enjoy profits without competing for merchants. (*Id.* at 37.) In addition, they observe that the plaintiffs in *Amex* did not present the same evidence of stifled competition and reduced quality that is now before this Court. (*Id.* at 37–38.) Specifically, Direct Action Plaintiffs contend that the evidence shows that Defendants prevented potential competitors from successfully entering the payment transactions market and

exposed merchants and cardholders to fraud as a result of delaying the EMV “Chip” technology migration. (*Id.* at 38–43.) Finally, they argue that Defendants misleadingly claim credit for the innovations of others in arguing that there have been significant innovations in the payment-card industry. (*Id.* at 43–44.)

Equitable Relief Class Plaintiffs also argue that the restraints have created barriers to new entry, preventing any significant new entry in the market in over thirty years. (ERCP *Amex* Opp’n 31–33.) They contend that the restraints prevent merchants from incentivizing cardholders to use more efficient payment methods, which in turn prevents potential entrants from using lower merchant prices to attract potential cardholders. (*Id.*)

“[T]o demonstrate anticompetitive effects on the two-sided credit-card market as a whole, the plaintiffs must prove that [the challenged restraints] increased the cost of credit-card transactions above a competitive level, reduced the number of credit-card transactions, *or* otherwise stifled competition in the credit-card market.” *Amex*, 138 S. Ct. at 2287; *US Airways*, 938 F.3d at 63 (same). Decreased quality in the market is an example of an anticompetitive effect. *US Airways*, 938 F.3d at 62 (finding that reduced quality of options available in the marketplace and technological stagnation were cognizable harms); *Virgin Atl.*, 257 F.3d at 264–65 (finding evidence that the consumers experienced a decrease in quality due to Virgin’s delayed entry, pointing to documentary evidence that Virgin offered consumers higher quality services that were previously unavailable to consumers).

In *Amex*, the Supreme Court observed that the credit-card market experienced “improved quality” and “fierce interbrand” competition despite the presence of the challenged restraints. 138 S. Ct. at 2289. In addition, the *Amex* Court claimed that the challenged restraints promoted competition by preventing merchants from steering cardholders away from Amex, thereby

undermining the cardholder's expectation of a frictionless transaction and endangering the viability of the network. *Id.* at 2289–90.

In contrast, the Second Circuit in *US Airways* relied on evidence that potential competitors attempted to enter the market with innovative technologies that were superior to those used by the defendant, but that the barriers to entry prevented the potential entrants from successfully doing so. 938 F.3d at 62. In addition, the court pointed to evidence that the defendant had slowed down the pace of innovation and used outdated technology because the use of the outdated technology was in the defendant's interest. *Id.* at 62–63.

Plaintiffs offer empirical evidence in support of their arguments that the network restrictions have “otherwise stifled competition” in the markets for credit- and debit-card transactions. Plaintiffs’ experts point out that the market has had no new entrants since Discover entered the market in 1986 and blame the network restrictions for Discover’s inability to win market share by offering a more attractive two-sided price. (Carlton Rep. ¶ 45; Harris Rep. ¶¶ 170, 572 (explaining that “since Discover launched in 1986, there ha[s] not been any other entrant in credit card network services in the U.S. that has made any noticeable progress”); *see also* Hausman Rep. ¶ 119; Stiglitz Rep. ¶ 119 (“[W]ith the Merchant Restraints in place, merchants cannot promote the use of [a] new low-cost card by explicitly pricing high-cost cards or using other effective steering means.”).) Discover’s campaign to win market share with a lower two-sided price “failed because Network Restrictions didn’t give [merchants] any effective strategies to shift share.” (Carlton Rep. ¶ 45.) In the early 2000s, Discover shifted its pricing strategy to increase its fees to merchants to more closely match those of Visa and Mastercard because, according to Discover’s president and COO, “offering a lower price was not going to

give [Discover] any business benefits, it was leaving money on the table.” (*Id.* (internal citations and quotation marks omitted); *see also* Stiglitz Rep. ¶ 120.)

Plaintiffs also present a litany of actions by Visa and Mastercard to suppress potential competitors in the payments space. For example, Visa and Mastercard implemented new rules to make it more difficult for PayPal to operate using nearly-costless Automated Clearing House (“ACH”) technology.³⁹ (*See* Hausman Rep. ¶¶ 251–62.) Similarly, Visa and Mastercard used the Honor All Cards and No Bypass rules to prevent Chase’s in-house payments processor, ChaseNet, from competing for transaction volume. (*See* Hausman Rep. ¶¶ 391–409; Harris Rep. ¶¶ 409–13 (describing how Visa kept ChaseNet out of bidding for a co-brand agreement with Costco).) In addition, Visa and Mastercard blocked attempts by First Data, one of the largest acquirers, to offer lower interchange through its proposed “First Data Net.” (*See* Hausman Rep. ¶ 412.) In fact, it was the threat of competition with First Data that prompted Visa to implement the No Bypass rule. (*Id.* ¶ 413; Harris Rep. ¶ 561.) Finally, in response to perceived competition from mobile wallets like Apple Pay, the networks entered into bilateral agreements with Apple to prevent it from developing a competing payment network.⁴⁰ (*See* Hausman Rep. ¶¶ 447–49; Harris Rep. ¶¶ 573–74.)

³⁹ (*See also* Hausman Reply Rep. ¶ 114 (“In my view, raising fees specifically targeted at one rival, and then offering to remove those fees if the rival abandons its business model, is not competition on the merits — it is the exercise of substantial market power. Indeed, PayPal was forced to relinquish its competitive business model, which it utilized successfully for over a decade, by Visa’s and Mastercard’s exercises of substantial market power.”).)

⁴⁰ Visa’s and Mastercard’s agreements with Apple regarding Apple Pay are the subject of a recently filed lawsuit in the Southern District of Illinois alleging a *per se* violation of the Sherman Act through horizontal market allocation. *See* Complaint ¶¶ 65–78, *Mirage Wine + Spirits, Inc. v. Apple, Inc.*, No. 23-CV-3942 (S.D. Ill. Dec. 14, 2023).

The Court acknowledges that the examples discussed above could be regarded as mere anecdote. Indeed, each example alone is anecdotal. However, the crux of the scientific method is the collection of data points that, together, constitute empirical research. *Scientific Method*, Black's Law Dictionary (11th ed. 2019) ("Generally, scientists agree that knowledge is produced through a series of steps during which data are accumulated methodically, strengths and weaknesses of information are assessed, and knowledge about causal relationships are inferred." (alteration and internal quotation marks omitted)). The Court is not suggesting that the sample size is sufficient to make predictions with any specific degree of confidence, but rather that the totality of the evidence cautions the Court against granting summary judgment.

Plaintiffs' empirical evidence is bolstered by substantial theoretical support. For example, Prof. Carlton explains how surcharging would improve competition in the market:

[A] merchant could invite competition between Visa and Mastercard . . . [by] steer[ing] customers towards the network offering the lower fees. One way a merchant could steer consumers away from Visa credit toward Mastercard credit is by imposing a surcharge on the use of a Visa card if its merchant fee is higher than that of Mastercard or on Mastercard if its fee is higher. This creates an incentive for Mastercard to lower its merchant fee because then it could expect to see consumers switching from using Visa to using Mastercard in response to the lower merchant fee reflected at the point-of-sale in a surcharge. Visa has similar incentives. These are precisely the forces of competition that lead to competitive pressure to keep merchant fees low for both Mastercard and Visa.

(Carlton Rep. ¶ 41.)

Prof. Hausman compares the Honor All Cards rule to an agreement among all beer companies to force their products on unwilling barkeeps:

If all beer companies in the U.S. (comparable to all card issuers) got together and agreed that no bar could sell any of their beers unless they sold all their beers, including the more expensive varieties, at whatever price they set, no serious economist would challenge the conclusion that the outcome was anticompetitive.

(Hausman Reply Rep. ¶ 368.) A jury could reasonably conclude, therefore, that the challenged restraints have “otherwise stifled competition.”

g. One-sided claims

Defendants argue that partial summary judgment is warranted on any and all claims based on one-sided markets and effects. (Defs.’ *Amex* Mem. 18–20; Defs.’ *Amex* Reply 5.) Defendants argue that the Supreme Court made clear in *Amex* that credit-card and debit-card networks are two-sided transaction platforms and, therefore, one-sided claims cannot be the basis of an antitrust challenge to two-sided transaction platforms. (Defs.’ *Amex* Mem. 18.) Direct Action Plaintiffs and Equitable Relief Class Plaintiffs have conceded that they can no longer proceed with one-sided claims. (DAP’s Counter 56.1 ¶ 159; ERCP’s *Amex* Opp’n 3 n.21.)

The Court therefore grants Defendants summary judgment on any and all one-sided claims.

h. State law claims

Defendants argue that for the reasons the Court should grant summary judgment on Plaintiffs’ federal claims, the Court should do the same for Plaintiffs’ state law claims. (Defs.’ *Amex* Mem. 39–41.) They contend that the relevant state laws are interpreted in the same manner as their federal counterparts. (*Id.*)

Direct Action Plaintiffs argue that even if Defendants are entitled to summary judgment under federal law, they are not entitled to summary judgment under state law claims because some states (*i.e.*, Georgia, New York, California, Hawaii, Kansas, Nebraska, Tennessee, Vermont, and Wisconsin) have decided that their applicable state laws should be interpreted independently of, or without being bound by, federal law. (DAP’s *Amex* Opp’n at 44–45, 45 n.46.) They argue that until those States have had occasion to decide whether to follow *Amex*,

the question remains open, and the Court should refrain from applying the decision to the state law claims in those states. (*Id.* at 45–46.)

Because the Court denies Defendants’ summary judgment motions as to the federal claims, it need not address this argument and declines to do so at this time.

III. Conclusion

Because Plaintiffs have provided empirical and direct evidence of supracompetitive profits and prices, as well as some evidence of stifled competition and reduced quality, along with evidence of Mastercard’s market power, the Court denies Defendants’ motions for summary judgment with respect to Plaintiffs’ two-sided market claims. Because of the Supreme Court’s decision in *Amex* and the Second Circuit’s decision in *US Airways*, the Court grants Defendants’ motions for summary judgment with respect to Plaintiffs’ one-sided market claims.

Dated: January 8, 2024
Brooklyn, New York

SO ORDERED:

/s/ MKB
MARGO K. BRODIE
United States District Judge